82343

Class _____ . No.

IN EXCHANGE.

2 70

Digitized by the Internet Archive
in 2016

https://archive.org/details/wisconsinmedical1019stat

# The Wisconsin Medical Journal

Owned and Published by the State Medical Society of Wisconsin.

A Monthly Journal of Medicine and Surgery.

---

EDITOR:
A. W. MYERS, M. D.
MANAGING EDITOR:
J. P. MCMAHON, M. D.
PUBLICATION COMMITTEE:
A. J. PATEK, M.D., Milwaukee. G. E. SEAMAN, M.D., Milwaukee,
O. H. FOERSTER, M.D., " C. S. SHELDON, M.D., Madison,
S. S. HALL, M. D., Ripon.

---

VOLUME X.
JUNE, 1911—MAY, 1912.

# Contributors of Original Articles to Volume X.

Brown, E. B., M. D., Beloit.
Cabot, Richard C., M. D., Boston.

Cairns, R. U., M. D., River Falls.
Caples, Byron M., M. D., Waukesha.
Carhart. G. A., M. D., Milwaukee.
Connell, F. Gregory, M. D., Oshkosh.

Dearholt, Hoyt E., M. D., Milwaukee.
De Wire, M. V., M. D., Sharon.
Doege, Karl W., M. D., Marshfield.
Drake, Frank I., M. D., Madison.
Dvorak, M. W., M. D., La Crosse.

Echols, Chester M., M. D., Milwaukee.
Egdahl, A., M. D., Menomonie.
Elmergreen, Ralph, M. D., Milwaukee.
Evans, Edward, M. D., La Crosse.
Eyster, J. A. E., M. D., Madison.

Fairfield, W. E., M. D., Green Bay.
Foerster, O. H., M. D., Milwaukee.
Gaenslen, F. J., M. D., Milwaukee.
Gilchrist, R. T., M. D., Wauwatosa.
Glasier, M. B., M. D., Bloomington.
Goldthwait, Joel E., M. D., Boston.

Greenberg, Harry, M. D., Milwaukee.
Gregory, A. T., M. D., Elroy.

Habhegger, C. J., M. D., Watertown.
Harbridge, D. F., M. D., Philadelphia.
Hilger, William F., M. D., Milwaukee.
Hitz, Henry B., M. D., Milwaukee.
Hopkinson, Daniel, M. D., Milwaukee.

Hyslop, Frederick R., M. D., Whitewater.

Jegi, H. A., M. D., Galesville.
Jermain, Louis, F., M. D., Milwaukee.
Johnson, Fred, M. D., North Freedom.
Jones, Richard W., M. D., Wausau.

Levings, A. H., M. D., Milwaukee.
Lorenz, W. F., M. D.., Mendota.
Lovenhart, A. S., M. D., Madison.

McMahon, J. P., M. D., Milwaukee.
Marquardt, C. H., M. D., La Crosse.
Mason, Everett L., M. D., Eau Claire.
Morwitz, S. M., M. D., Milwaukee.

Ravenel, M. P., M. D., Madison.
Redelings, T. J., M. D., Marinette.
Rittenhouse, Walter, M. D., Lake Geneva.
Robertson, W. E., M. D., Philadelphia.
Rogers, Arthur W., M. D., Oconomowoc.
Rogers, Philip F., M. D., Milwaukee.

Seaman, G. E., M. D., Milwaukee.
Smith, Joseph F., M. D., Wausau.
Sykes, L. G., M. D., Milwaukee.

Van Kirk, Frank W., M. D., Janesville.

Washburn, Robert G., M. D., Milwaukee.
Watkins, Thomas J., M. D., Chicago.

Zierath, W. F., M. D., Sheboygan.

# INDEX.


Page

Address, Annual, of the President of the State Medical Society of Wisconsin ..... 1
Animal Experimentation, Relation of the Physician to..... 151
Arsenic on the Skin, The Action of. 249
Arterio-Sclerosis in the Young..... 491
Axis Traction Forceps ..... 262

Bacterins in Pneumonia, A Preliminary Report of the Value of..... 714
Bladder, Intraperitoneal Rupture of Urinary ..... 144

BOOK REVIEWS:
Aaron, Charles D., Diseases of the Stomach ..... 351
Adami, J. George, Systemic (Including Special) Pathology..... 124

Ballinger, W. L., Treatise on Diseases of the Nose, Throat and Ear ..... 64
Blair, Thomas S., Public Hygiene 240
Brickner, W. M., 1000 Surgical Suggestions ..... 117
Bryant, Jos. D., and Buck, Albert H., American Practice of Surgery ..... 553
Burrage, W. L., Gynecological Diagnosis ..... 120

Cables, Henry A., Golden Rules of Diagnosis and Treatment of Diseases ..... 100
Cabot, Richard C., Case Histories in Medicine ..... 656
Crothers, T. D., Inebriety, A Clinical Treatise and Study.... 123
Crossen, Harry Sturgeon, Diagnosis and Treatment of Diseases of Women..... 595

Dock, George, and Bass, Charles C., Hookworm Disease..... 122
Donahoe, Margaret Frances, Manual of Nursing..... 295

Green, T. Henry, Manual of Pathology and Morbid Anatomy.... 296
Hare, Hobart Amory, Modern Treament ..... 121

Page

Harrington, Charles, Manual of Practical Hygiene ..... 348
Hieronymus Fracastor's Syphilis. 295
Hirschberg, J., History of Ophthalmology ..... 614
Hoxie, George Howard, Symptomatic and Regional Therapeutics. 173

Kanavel, Allen B., Infections of the Hand ..... 684
King, A. F. A., Manual of Obstetrics ..... 119

Litora Alicna ..... 119

Manquat, A., Principles of Therapeutics ..... 64
May, Charles H., Manual of the Diseases of the Eye..... 609
Morse, John Lovett, Case Histories in Pediatrics ..... 121
Mumford, James G., One Hundred Surgical Problems ..... 349

New and Non-official Remedies. 1911 ..... 123
Nostrums and Quackery..... 295

Ostwald, Wilhelm, Great Men.... 618

Pickett, Montgomery, The Fourth Physician ..... 350
Potts, Chas. S., Electricity..... 617
Practical Medicine Series..118-349-618
Pritchard, E. R., Health Hints... 107
Progressive Medicine .....294-615

Simon, Charles E., Manual of Clinical Diagnosis ..... 616

Taylor, E. W., Case Histories in Neurology ..... 656
Thornton, E. Quinn, Manual of Materia Medica ..... 540
Treves, Frederick, Surgical Applied Anatomy ..... 352
Tuberculosis Directory ..... 117

Uhthott, W., Ocular Changes in Diseases of the Brain..... 551
Von Helmholtz, H., Handbook of Physiological Optics .....242, 612

Page
Ware, Martin W., Plaster of Paris and How to Use It..... 118
Wilson, J. C., Medical Diagnosis. 657
Walbarst, A. L., Gonorrhea in the Male ..... 170
Wood, Robert W., Physical Optics 554

Zahorsky, John, Golden Rules of Pediatrics ..... 100

Brown, E. B., Scientific Spirit in the County Society..... 363
Business Side of Practice..... 577

Cabot, Richard C., Essentials and Non-essentials in Physical Diagnosis ..... 183
Cairns, R. U., European Clinics.... 95
Cancer of Upper Rectum and Sigmoid Flexure ..... 137
Caples, Byron M., Annual Address of the President of the State Medical Society ..... 1
Carhart, G. A., Placenta Previa.... 702
Cessation of Respiration, Prolonged 336
Commitment of the Insane, A Few Suggestions to the Examining Physicians in the ..... 685
Connell, F. Gregory, Ileocecal Adhesions ..... 125

Dearholt, Hoyt E., Relation of the Physician to the Public Campaign Against Tuberculosis ..... 65
De Wire, M. V., How to Secure the Attendance of Country Members. 176
Diabetes Insipidus ..... 590
Diagnosis, Essentials and Non-essentials in Physical Diagnosis.. 183
Diuretics, Relative Value of..... 619
Dodd, John M..... 22
Doege, Karl W., Cancer of the Upper Rectum and Sigmoid Flexure ..... 137
Drake, Frank I., On Human Eugenics ..... 626
Dvorak, M. W., Report of Two Cases of Traumatic Tetanus..... 20
In Memoriam ..... 343

Echols, Chester M., Surgical Importance of Certain Vestigeal Structures ..... 641
Editorial Comment .....24, 102, 162, 226, 278, 340, 464, 532, 596, 658, 722
Egdahl, A., Preventive Medicine.... 677
Elmergreen, Ralph, Vaginal Ptosis: Surgical Treatment ..... 560
Essentials and Non-essentials in Physical Diagnosis ..... 183
Eugenics, On Human ..... 626
Evans, Edward, What to Strive for. 292
Sacro-Iliac Strain ..... 654

Page
European Clinics ..... 95
Eyster, J. A. E., Venous Pulse and the Heart Sounds..... 299

Fairfield, W. E., Some Observations upon Intra-Peritoneal Infections.. 632
Fee Splitting and Commissions..... 228
Foerster, O. H., Salvarsan and Its Use in the Treatment of Syphilis. 213

Gaenslen, F. J., Retroversion of the Uterus ..... 15
Gastroptosis from a Radiographic Standpoint ..... 648
Gilchrist, R. T., Case of Hydatidiform Mole ..... 274
Glasier, M. B., How Shall We Make Our Meetings More Interesting and Successful ..... 113
Goldthwait, Joel E., Our Present Understanding of the Rheumatoid Diseases ..... 243
Graves' Disease ..... 202
Gregory, A. T., The County Secretary as a Peace Maker..... 174
Greenberg, Harry, Surgical Management of Developmental Defects in the New Born..... 706

Habhegger, C. J., Impaling Injuries of the Pelvis.....449, 500
Harbridge, D. F., Ocular Manifestations of Hysteria..... 572
Hilger, William F., Gastroptosis from a Radiographic Standpoint.. 648
Hitz, Henry B., Improved Mouthgag for Tonsillectomy..... 652
Hopkinson, Daniel, Arterio-Sclerosis in the Young..... 491
Hydatidiform Mole, A Case of..... 274
Hyperthyroidism ..... 202
Hyslop, Frederick R., Rupture of Uterus ..... 99
Hysteria, Ocular Manifestations of.. 572

Ileocecal Adhesions ..... 125
Impaling Injuries of the Pelvis.449, 500
Injuries of the Orbit..... 311

Jegi, H. A., Membership and Attendance ..... 486
Jermain, Louis F., Graves' Disease. 202
Johnson, Fred, Diabetes Insipidus. 590
Jones, Richard W., Medical Inspection of Schools..... 319

Levings, A. H., Anomalous Renal Vessels Causing Renal Colic..... 555
Lorenz, W. F., Lumbar Puncture... 433
Lorenz, W. F., A Few Suggestions to the Examining Physicians in the Commitment of the Insane... 685

Page

Lovenhart, A. S., Relative Value of Diuretics ..... 619
Lumbar Puncture ..... 433

McMahon, J. P., Axis Traction Forceps ..... 262
Marquardt, C. H., Annual Address of the President of the La Crosse County Medical Society..... 488
Mason, Everett L., Intraperitoneal Rupture of Urinary Bladder..... 144
Medical Defense ..... 103
Morwitz, S. M., Prolonged Cessation of Respiration ..... 336
News Items and Personals.....29, 106, 167, 230, 280, 345, 471, 534, 601, 665, 735

OBITUARIES.
Ackley, C. B..... 473
Baker, Francis M..... 474
Breitzman, L. ..... 347
Brewer, Frank M..... 107
Broughton, Russell ..... 666
Buckridge, Isaac ..... 231
Burke, James ..... 282
Cogswell, Frank ..... 667
Cole, H. B..... 537
Dvorak, M. W..... 346
Gilluly, Thomas ..... 602
Grafton, Guy A..... 168
Hadley, G. H..... 537
Hebert, Oliver ..... 736
Johnson, S. D..... 473
Lunn, M. J..... 736
Macneill, Jos. E..... 473
Mahoney, James E..... 282
Manley, A. B..... 168
Mason, Darius ..... 736
McKinnon, Hugh ..... 473
Miller, D. McL..... 736
Minahan, W. E..... 736
Moore, Charles H..... 29
Mosely, W. H..... 107
Neville, Wendell D..... 231
Newell, H. B..... 168
Noble, James H..... 602
Pollock, George ..... 168
Prasch, Hubert F..... 602
Reitman, Arthur ..... 474
Roberts, G. W..... 347
Rust, F. L. D..... 667
St. John, James W..... 536
Selbach, John J..... 29
Smith, C. M., Sr..... 666
Wakefield, P. A..... 107
Weaver, C. H..... 346
Wyatt, Daniel B..... 346

Ocular, Manifestations of Hysteria. 572
Operative Treatment of Long Bone Fractures ..... 9

Page

Orbit, Injuries of the..... 311

Pelvis, Impaling Injuries of....449, 500
Peritoneal Infections, Some Observations upon Intra-..... 632
Placenta Previa ..... 702
Puerperal Infections, The Treatment of ..... 89
Puerperal Infections, Treatment of. 698

Rabies in Wisconsin and its Control 84
Ravenel, M. P., Rabies in Wisconsin and its Control..... 84
Redelings, T. J., Annual Address of the President of the Association of County Secretaries and State Officers ..... 237
Renal Colic, Anomalous Renal Vessels Causing ..... 555
Retroversion of the Uterus, Etiology and Symptoms ..... 15
Rheumatoid Diseases, Our Present Understanding of ..... 243
Rittenhouse, Walter, Relation of the Physician to Animal Experimentation ..... 151
Robertson, W. E., Preliminary Report of the Value of Bacterins in Pneumonia ..... 714
Rogers, Arthur W., Traumatic Neuroses ..... 156
Rogers, Philip F., Operative Treatment of Long Bone Fractures... 9
Rupture of Abdominal Viscera without External Injury..... 268
Rupture of Urinary Bladder, Intraperitoneal ..... 144
Rupture of Uterus..... 99

Salvarsan and its Use in the Treatment of Syphilis..... 213
Sacro-Iliac Strain ..... 654
School, Medical Inspection of..... 319
Seaman, G. E., Injuries of the Orbit 311
Sleyster, Rock, Booster Sermons.. .....360, 485, 676
Smith, Joseph F., Rupture of Abdominal Viscera without External Injury ..... 268
Surgical Management of Developmental Defects in the New Born. 706

SOCIETY PROCEEDINGS.
County Societies.
Ashland-Bayfield-Iron ..... 61
Barron, Polk-Washburn-Sawyer-Burnett ..... 109
Brown-Kewaunee ..... 546
Calumet .....172, 233, 673
Chippewa .....61, 477, 673
Clark ..... 109

Page
Crawford ..... 62
Dane .....478, 674, 739
Dodge ..... 478
Douglas ..... 498
Eau Claire .....355, 740
Fond du Lac.....110, 289, 355, 674
Grant .....62, 234, 478
Green ..... 479
Green Lake-Waushara-Adams.....
.....235, 356, 479, 605, 740
Jefferson .....173, 356, 546
Juneau ..... 480
Kenosha .....173, 481, 546, 606, 674
La Crosse.....235, 256, 481, 546, 606
La Fayette ..... 739
Langlade .....482, 547
Marathon .....235, 482
Marinette-Florence .....289, 357, 607
Milwaukee-Ozaukee .....110, 482, 607
Monroe ..... 548
Outagamie .....112, 608
Pierce ..... 357
Portage ..... 548
Racine ..... 112
Rock .....289, 357, 483, 608, 674, 740
Shawano .....112, 483, 675
Sheboygan .....62, 483, 608
St. Croix .....358, 548
Trempealeau-Jackson-Buffalo .... 358
Walworth ..... 609
Waukesha .....291, 549
Waupaca ..... 112
Winnebago ..... 359
Wood .....483, 675

District Societies.
Second Councilor District..... 235
Seventh Councilor District..... 290
Ninth Councilor District..173, 549, 740
West Wisconsin District Medical Society ..... 483
Brainerd Medical Society..... 172
Fox River Valley Medical Association ..... 549
Interurban Academy of Medicine. 675
Milwaukee Physicians' Association 549
Neenah-Menasha Medical Club... 484
North Side Physicians' Club..... 675
Oshkosh Medical Club..... 549
Superior Clinical Club..... 290
Twin City Medical Society....290, 741

State Medical Society of Wisconsin.
Digest of Minutes of House of Delegates, 65th Annual Meeting. 33
Digest of Proceedings of General Session, 65th Annual Meeting... 38
List of Members of..... 421
Proceedings of the General Session ..... 369

Page
Transactions of the 65th Annual Meeting ..... 367
Annual Meeting of Council..... 512
Secretary's Notes.....543, 670, 738
Program of the 66th Annual Meeting .....663, 728

Association of County Secretaries and State Officers.
Digest of Proceedings of 2nd Annual Meeting ..... 51
Roster of Attendance at 2nd Annual Meeting ..... 174
Annual Address of the President of the Association..... 237
Booster Sermons .....360, 485, 676
Communication from a Secretary. 610
County Secretary as a Peace Maker ..... 174
How Shall We Make Our Meetings More Successful ..... 113
How to Secure the Attendance of Country Members at Meetings.. 176
Membership and Attendance..... 486
Preventive Medicine ..... 677
Scientific Spirit in the County Society ..... 363
What to Strive for..... 292
Program of the 3rd Annual Meeting ..... 662

Sykes, L. G., Case of Hydatidiform Mole ..... 274

Tetanus and Fourth of July Injuries ..... 24
Tetanus, Report of Two Cases of Traumatic, with Recovery..... 20
Tonsillectomy, Improved Mouth-gag for ..... 652
Traumatic Neuroses ..... 156
Tuberculosis, Relation of the Physician to the Public Campaign Against ..... 65
Typhoid Vaccination ..... 164

Vaginal Ptosis; Surgical Treatment 560
Van Kirk, Frank W., Treatment of Puerperal Infections ..... 89
Venous Pulse and the Heart Sounds 299
Vestigeal Structures, The Surgical Importance of Certain..... 641

Washburn, Robert G., Action of Arsenic on the Skin..... 249
Watkins, Thomas J., Treatment of Puerperal Infections ..... 698
Wausau ..... 732

Zierath, W. F., Business Side of Practice ..... 577

# THE WISCONSIN MEDICAL JOURNAL

JUNE, 1911.

## ORIGINAL ARTICLES.

### THE ANNUAL ADDRESS OF THE PRESIDENT OF THE STATE MEDICAL SOCIETY OF WISCONSIN.

BY BYRON M. CAPLES, M. D.,

WAUKESHA.

Ladies and Gentlemen of the State Medical Society of Wisconsin: Standing here today before this society of physicians who have done me the honor to make me their presiding officer, I can but feel the great responsibility which the elevation to this position imposes upon me.

To be the President of an assemblage of educated men and women representing the most responsible profession known to civilization is indeed an honor of which any man may be justly proud, and I hope that my labors in behalf of the society, and for the profession and my fellowmen may be such that you will have no cause to regret the honor conferred.

I shall endeavor to preside over your deliberations (both scientific and business) with one desire paramount, that of assisting you in advancing the science of medicine and elevating the standard of our profession, and I feel confident of your loyal support in these efforts.

During the lifetime of some of us—and perhaps of most of us—medical research has accomplished marvels, but at no time in the history of the world has so much been crowded into a few short years as in, perhaps, the last decade. This is especially true of the advance in preventive medicine which has been phenomenal, so that today many of the most dreaded diseases have lost the terror they once possessed. Diseases that devastated cities, stifled commerce, and brought sorrow to our firesides, have been conquered by scientific research. The dread

82343

AUG 8 - 1912

of dyphtheria has lost its hold on the heart throbs of mothers; tetanus its grip; meningitis its paralyzing force; smallpox its horrible disfigurement; the hook-worm its fang; and so on down the list.

It may not be to our credit that it required a war to arouse us to a realization of the ravages by fevers and the necessity of combating them, but such is the case. In this field the greatest advance has been made in tropical climates. The Isthmus of Panama was once dreaded and shunned, but today is a pleasure resort where one may go with a feeling of assurance that yellow fever will not count him among its victims. Malaria no more sends its poisoned arrow to the vital spot. Not again will we require our brave soldiers to face bullets and all the hardships of war only to return to bivouac and there die of typhoid.

I need not tell you of the noble men who have accomplished all this. You know how they have worked with untiring zeal, hesitating at no obstacle, endangering health, and sacrificing even life itself—and all given freely, that they might help mankind. Our history has never produced braver men than those who have responded thus, not to a call to arms but to the call of duty, self-imposed. Let us honor and emulate them.

Since far back in the ages the dreaded white plague has laid hold upon the people and has been taking an ever increasing number of our loved and best year by year; but now this disease, too, is retreating before its foe, scientific prevention. In bringing this result about nothing has been more effective than the educational campaign that has been carried into almost every home; for the Anti-Tuberculosis Association has proven that the public readily appreciates an educational campaign for the public health. We need not look beyond the confines of our own beautiful state to see what can be done by men of intelligence and force. Competent authority states that the Wisconsin Anti-Tuberculosis Association is generally conceded to be second only to that of New York in efficiency. Certainly each one of us should lend a hand in the great work. I see before me men who are making much personal sacrifice that others may live in health and enjoy greater comfort and happiness. They are not content to work along in a narrow way but are aggressively carrying the great propaganda to our legislatures and there calling the attention of our representatives to the necessity of more care, more comfort, and better education for our people.

The lectures and demonstrations which are being carried on by the Anti-Tuberculosis Association will prove of great benefit to preventive medicine in other lines. Arouse the interest of the intelligent

public citizen in such questions as the reduction of infant mortality, the scientific and intelligent care of the insane, the abuses of patent nostrums, and in fact all forms of quackery. Then we shall find them anxious to assist in the passage of adequate laws. The County Sanitarium will come because it is needed and because of the efforts of some of our members who are proving its necessity.

We, today, are proud of the achievements of science and glad of what others have accomplished, but let us not be satisfied with present results no matter how brilliant they may be, for much remains for the conscientious investigator and for the promulgator of truth.

### INFANTILE DISEASES.

In this class poliomyelitis has caused considerable popular alarm as well as anxiety to the medical profession, owing to the vast area over which it has extended and its disastrous results. But again there comes hope because of the research work done in at least one great institute. To prevent its spread prompt quarantine is of first importance. Again the serum treatment comes to aid.

### OPHTHALMIA NEONATORUM.

Blindness from this cause is daily becoming less and should eventually become rare indeed; preventive methods again producing the desired results. Stringent legislative enactments should require every physician and midwife to take all precautionary measures.

The medical inspection of schools is a matter too long neglected. My predecessor called attention to this subject and I wish simply to emphasize it here. The laws rightly compel us to send our children to school, but when there they should be fully protected from contagion, and I feel that the measure now before the legislature should pass.

### SYPHILIS AND GONORRHEA.

These great social evils should be considered and active measures taken by this society to stop the contamination of innocent victims of these diseases which now are undermining the health of the nation. Great stress is being laid on preventive measures in other lines and they should not be neglected here. Even the meagre statistics at our command show that much of the ill health and misery of the people are due to these two diseases, and stringent laws should be enacted regulating the marriage of persons afflicted with either. A member of this society has introduced a bill in the legislature which ought to become a law of this and of every other state in the union.

## STERILIZATION.

This is another subject which I cannot pass without mention. This measure is being tried in other states and I believe it will, when properly brought to public notice and thoroughly understood, become a law in this state. It is a measure I have for years advocated. In all cases of insanity, idiots, imbeciles, sexual perverts, defectives, epileptics, rapists, and criminals, procreation should be prevented. As the hereditary tendency of these classes to produce their kind is unquestioned, the increase being more rapid than the general increase in population, the great burden laid upon the community for their maintenance is becoming a serious problem. The operation as now advised eliminates all elements of danger, does not interfere with the special function, and the procedure will only stop the propagation of the unfit and subsequently relieve the state of a serious burden. Sentiment must be laid aside in this as in many other matters and the greatest good to future generations and the welfare of our country only considered. A vigorous nation can be maintained only by the rearing of a vigorous people.

## NATIONAL DEPARTMENT OF HEALTH.

There is now before Congress a bill which, if passed, will be of incalculable value to the nation. It is not one of class legislation, but one that is for the interest of every individual under this government; one that will show that the nation takes at least as much interest in human beings as it does in its swine and its asses. This bill provides for the establishment of a Department of Health and the measure is advocated by President Taft and the government medical officials. It is endorsed by both the great political organizations as well as by thousands of scientific medical men all over the land.

If this bill passes and its purposes are carried out, it will improve and protect the health of the nation and lengthen human life, every day of which is an asset to the government.

The men who oppose such a Department of Health are not those who have acquired a scientific medical education and are working unselfishly for mankind. There is no desire on the part of the medical profession to control the medical practice for selfish interests; their one desire is to protect and conserve the public health, without which a nation cannot long survive.

An organization called "The National League for Medical Freedom" was formed to oppose the establishment of such National Department of Health. I am led to believe that not many of these men

have sufficient knowledge or training to appreciate the enormous benefits to be realized by the establishment of such a department. Others are those who, for commercial reasons, are willing to jeopardize their own lives, as well as those of others, rather than conform to just regulations in the manufacture of pure drugs and pure foods—certainly a superficial view of so momentous a question.

Let us have the Department of Health. Let every member of this society continue to work, with that unerring fidelity that has always characterized our profession, for the establishment of such a department which is today the greatest national public health measure.

## MEDICAL EDUCATION.

Medical education is advancing with rapid strides. The preliminary education is as essential to successful scientific research as the special education. The standard cannot be too high nor the training too thorough. Those who enter this profession must learn to make fine discriminations, as the things they fail to do are often of as much importance as the things they do. For this reason every individual who treats human ailments, regardless of methods employed, should be required to possess a thorough knowledge of the fundamental branches of the medical course.

The objection to the various medical sects is that their members enter the profession with a smaller amount of preliminary and medical training than do regular physicians with the present high standards. With this in view we should insist on the appointment of the very best men to positions on state medical boards, as without this precaution well educated and thoroughly trained physicians may be required to take an examination before men markedly their inferior in every respect—rather an embarrassing situation for both.

I would have our state examinations include practical laboratory and clinical tests, since the written examinations as given by many of the states could be passed by a fairly intelligent person who had studied a quiz compend for a few weeks under the guidance of some shrewd but unscrupulous individual. It is a fact that on account of the ease with which our examinations can be passed, licenses to practice medicine are readily granted to a considerable number of foreigners who would be unable to secure them in their home countries.

Make our standards high; have better men in the profession, and as the years go by, more and more will their merits be recognized by the intelligent, more good accomplished, more honor obtained to the profession.

Laws are now too common permitting the practice of fads and fakes, such as mind cure, chiropractic, faith cure, magnetic healing, hypnotism, Christian Science, Osteopathy, optometry, in fact any "ism" that is drugless or at least claims not to use poisonous drugs.

The organized medical profession has been accused of attempting a "Medical Trust". The truth is that we, as an organization, insist only on a single standard of qualification for all those who wish or attempt to treat the sick, and so long as the person desiring the privilege is able to satisfy a competent medical board that he possesses the necessary qualifications, he has a right to call himself anything he pleases and to use whatever means of treatment he wishes. However, the establishment of a separate sectarian board with a lower standard is unquestionably not fair and not just. Wisconsin has the single board. Let us maintain it and require all who wish to practice medicine in any of its branches to pass the prescribed examination.

The course in "Public Health", established at the University of Wisconsin, is another advance and certainty, as has been recently demonstrated, one sadly needed.

All over the land our health officers have been appointed without any regard to their special qualifications. That an office which means so much to a city or community, should be administered by an individual possessing no special training or technical knowledge or other qualifications, is certainly a travesty on our institutions. Beyond question Wisconsin has established a precedent that must soon be followed by other states. In cities and other densely populated districts more and special care must be taken, and only those fully cognizant of the dangers which surround these communities and having special knowledge of the methods by which these dangers are combated, will be selected for these important positions. Pull, politics or penury, in fact everything save fitness must be eliminated in the making of these appointments.

Right here I think I may properly mention the water supply. The contamination of our lakes and streams is becoming a menace to health; yet those who have control of these affairs appear to think they can pollute the supply with impunity. With our great abundance of pure water people should not be compelled to drink impure. That typhoid is not more prevalent in some cities of Wisconsin is a source of surprise to anyone who has a knowledge of existing conditions. That anyone can expect to get a pure water supply from a contaminated lake seems most preposterous. It is most desirable that the bill now before the legislature, which seeks to prevent the pollution

of our streams and lakes, should become a law. Then, and then only, can we hope for a pure water supply.

### SECRET COMMISSIONS.

This question is a disagreeable one and I dislike to approach it, but for the fact that considerable has been said on the subject I mention it, knowing as I do that there must be a great temptation occasionally for the young men who have struggled to finish the medical course. Let me admonish you to stop, look, listen. Stop before you approach a graft; look your trusting, suffering patient and fellow being in the face and then turn and look at your own face in the mirror; listen to the voice of your conscience, admonishing you to be true to your every manly instinct. If you wish to be respected you must first be self-respecting. The fact that this division is made secretly ought to be sufficient evidence to you that it will not bear the scrutiny of honorable men. Let there be nothing but honor in our ranks; then we can talk reform to others with full consciousness of right within.

### VITAL STATISTICS.

This most important matter must be mentioned briefly that you may not lose sight of its importance. All public health work is based largely on this. Records of marriages, births, deaths, and divorces are necessary, not only to the physician for his use in medical science, but also as legal records. I hope that each member of this society will see to the keeping of correct records and make all necessary reports to the proper authorities.

### CRIMINAL INSANE.

I wish to call attention to one more need of our state—a separate institution for the care of its criminal insane. Common humanity demands that those unfortunates who suffer from mental diseases but who are not criminals, should not be confined with the more depraved class. We must give such criminals the best care possible now that we have them with us, but make such scientific regulations that future generations may not have a greater burden than is absolutely necessary.

### OUR STATE SOCIETY.

I can but note with pleasure the rapid increase in the membership of our society and the co-operation and goodfellowship of its members. As we become better acquainted, we realize more fully that the physi-

cians of Wisconsin are able and progressive men and women, all working together for a united profession and for the betterment of public health conditions. Eight years ago our membership was about 700; the number has rapidly increased since the reorganization, until now we number over 1600 as skillful and faithful an army of workers as can be found in any state or any land under the broad canopy of heaven. Let us stand together for the better protection of those to whom we minister. No profession ever had a more thoughtful, industrious, earnest, and appreciative people with whom to deal. Let us each leave this meeting with higher ideals, greater zeal, and a full determination to serve humanity to the very best of our several abilities. Let us not forget that we follow the grandest calling on earth and have the greatest opportunities of doing good to our fellow men. We deal with all that to him is vital; not only his health, but his happiness and all that he holds dear is put in our keeping. Above all let us not forget our humanity in professional zeal, and as Kipling says:

If you can keep your head when all about you
Are losing theirs and blaming it on you;
If you can trust yourself when all men doubt you,
But make allowance for their doubting too;
If you can wait and not be tired by waiting,
Or being lied about, don't deal in lies,
Or being hated don't give way to hating,
And yet don't look too good, nor talk too wise;

If you can dream—and not make dreams your master;
If you can think—and not make thoughts your aim,
If you can meet with Triumph and Disaster
And treat those two impostors just the same;
If you can bear to hear the truth you've spoken
Twisted by knaves to make a trap for fools,
Or watch the things you gave your life to, broken,
And stoop and build them up with worn-out tools;

If you can make one heap of all your winnings
And risk it on one turn of pitch-and-toss,
And lose, and start again at your beginnings
And never breathe a word about your loss;
If you can force your heart and nerve and sinew

To serve your turn long after they are gone,
And so hold on when there is nothing in you
Except the Will which says to them: "Hold on!"

If you can talk with crowds and keep your virtue,
Or walk with Kings—nor lose the common touch,
If neither foes nor loving friends can hurt you,
If all men count with you, but none too much;
If you can fill the unforgiving minute
With sixty seconds worth of distance run,
Yours is the Earth and everything that's in it,
And—which is more—you'll be a Man, my son!

---

# THE OPERATIVE TREATMENT OF LONG BONE FRACTURES.*

BY P. F. ROGERS, M. D.,
MILWAUKEE.

Prior to the advent of the X-ray, the treatment of fractures was a comparatively safe occupation. The unfortunate who sustained a broken bone was turned over to the care of a doctor—any one with an M. D. attached to his name was supposed to be competent to handle the job. The limb was manipulated, pulled, twisted, bent and straightened, a retention dressing of some kind was applied, a few bricks or flatirons furnished extension if it chanced to be a broken leg, and the job was done, the bone was set. When healing was complete and the dressing was removed, shortening, angular deformity more or less marked, and impaired function were very common if not the rule, were expected by the doctor and accepted with resignation by the patient as inevitable. The doctor collected his fee and the patient adapted himself to his impaired physical condition as best he could, considering himself fortunate that the result was not worse. With the development of the X-ray the spot-light was turned on the situation and the ghastly truth revealed—revealed to the patient as well as to the doctor—that nine times out of ten the bone was not set at all, but remained displaced exactly as it had been before the manipulations were made and the dressings applied, the limb having been merely more or less straightened by the treatment.

---

*Read before the Milwaukee Medical Society, May 23, 1911.

When the significance of this revelation was realized by the parties to the transaction, the party of the first part consulted his lawyer, and he of the second part called in a liability insurance agent, professional reputations began to suffer a blight, and the hard earned savings of years of professional labor were frequently handed over to the patient to satisfy his craving for damages.

Beneficent results have followed, for more and more has the incompetent or poorly equipped physician refused to handle fracture cases, to his own advantage as well as to that of suffering humanity, and more and more the medical profession at large has awakened to the realization of the fact that while it has made giant strides in many directions in recent years, its work in the treatment of fractures has been nothing short of a disgrace to it, and earnest and intelligent study is now being put upon the subject in many quarters.

I do not affirm that no effort at improvement has been made hitherto, but until recent years those efforts have been largely misdirected and confined mainly to the development of ingenious retention and extension devices, to new splints and splint materials, to fracture beds and boxes, inclined planes and methods of bandaging, while the real nub of the whole matter, viz., the perfect reapposition and realignment of the fragments, has been neglected.

The good old-fashioned Buck's extension and the ambulatory splint are attempts in this direction as regards the leg, and the Lorenz-Lemon plan of forcible mechanical stretching, manual reapposition and retention by hip to heel plaster cast marks a great step in advance, but the Buck's extension frequently fails to overcome shortening, the X-ray picture of a limb carefully encased and adjusted in the ambulatory splint commonly reveals inches of over-lapping, and Doctor Lemon will admit, I think, that aside from several disagreeable features inherent in the stretching machine, it does not by any means always produce perfect reduction and alignment, and that functional results are not always all that could be desired.

There is only one way in which perfect reduction and realignment of a fractured long bone can be obtained, and that is by direct manipulation of the bone itself through an open wound, and retention by means of some device applied directly to the bone.

It requires no great exercise of the imagination to realize the difficulty and usually the impossibility of perfectly readjusting a broken bone by manipulation through overlying skin, fascia and muscle, and granting that such reduction and realignment is obtained by this means, the retention of such position in a case of oblique or

spiral fracture against the powerful pull of the muscles (which always tend to restore the faulty position) by means of splinting devices applied to the outside of the limb, is a dream not often fulfilled.

Of course direct manipulation of the fragments in compound fractures, and retention by wires, nails, screws, medullary pegs, etc., has been practiced for many years, but the deliberate opening down upon simple fractures has been feared and frowned upon by the profession apparently as much since the advent of the era of aseptic surgery as before. Why? Cannot the field of operation, the instruments, dressings and hands of the operator and assistants be as properly prepared for work of this kind as for abdominal work? We do not fear to open the abdomen. Why should we fear to open a leg or an arm? Sepsis is the only thing to be feared. Can we not ward off sepsis here as well as elsewhere? I think so. And I think the object at stake would warrant the exercise of a little temerity even if the danger of infection here were greater than elsewhere, which I do not admit. If infection and suppuration does occur, drainage can be promptly established, but it should seldom occur if the same precautions are observed as those which guide us in the abdominal or other parts of the surgical field.

Lane of London is one of the pioneers in this work. A paper in which he reported his own experience and advocated the opening of simple fractures over sixteen years ago brought forth a storm of protest, but he is to-day as strong an advocate of the procedure as ever, and is obtaining results that are apparently almost uniformly perfect. He has raised the fracture department of surgery from disgrace to a position of credit equal to that of any other department, and it is high time that those who are doing fracture work should sit up and take notice. It is also time that the family doctor, the man who confines himself to the practice of medicine, should stop attempting to handle fractures and should turn them over to the surgeon, for, whether treated by open operation or not, the care of fractures is surgical work and should be in the hands of the student of mechanics, not of the student of medicine.

The indication for open operation is plain. Every long bone fracture, whether simple or compound, that cannot be satisfactorily reduced and retained in position by the ordinary means, should be operated. Now, what constitutes "satisfactory reduction" may vary considerably with the circumstances of the patient and the nature of the individual case.

In the old and feeble, the tabetic and diabetic, and others who

are more or less incapacitated already, or who, for any reason, may be bad surgical risks, it may be better to take chances on imperfect reduction and impaired function than submit them to what danger a surgical operation might involve.

Again, the X-ray may show an anatomically unsatisfactory position in a fracture of the fibula or of one of the bones of the forearm, while experience may show that with the tibia or the other forearm bone intact a perfectly satisfactory functional result may be confidently expected. In such cases "hands off" should be the rule.

The indication is most imperative when the fracture sufferer is a laboring man, for upon the intact condition of his arms and legs depends his ability to earn his living and support his family. A very large number is annually recruited into the ranks of the dependents or semi-dependents from the unfortunate victims of poorly treated fractures.

*Technique.*—The incision should be made where easiest access to the bone can be had: that is, through the thinnest overlying layer of tissue; its mid point should be directly over the site of the fracture; it should reach down to but not penetrate the periosteum, and it should be long enough to give ample room for manipulating the bone fragments. The reapposition of the fragments may prove by no means easy and may necessitate sharp bending, coaptation of the ends and then straightening. It should be the endeavor to make the reduction absolutely perfect so that the jagged points on the ends shall interlock with one another. The old methods of retention by means of pegs, nails, wires and screws have been demonstrated to be very unsatisfactory, and the metal plate, screwed on, as advocated by Lane, is undoubtedly the best and surest means of holding the fragments firmly in place. This is of steel, nickel plated, of various lengths and thicknesses, rigid or flexible as the conditions may require, and perforated with two or more countersunk holes for the reception of the screws, which are threaded up to their heads and are of various lengths suitable for catching either the proximal layer of compact bone alone, or of reaching through the medulla and engaging the distal layer also. Generally I believe catching the proximal layer is all that is necessary. After reduction has been made the limb should be steadied by assistants and rested upon some solid base, such as a sand-bag, while the plate is being applied. With the plate in place, holes should be drilled large enough to accommodate the screws easily and yet permit them to take a firm grip on the compact bone. If the holes are too small, much force will have to be used in driving home the

screws and there is danger of splitting the bone and thereby weakening the hold of the plate. In most cases there should be two screws on either side of the break—I doubt if more are often necessary—and I believe that in fracture of both forearm bones it will generally be found possible to maintain perfect reduction and firm retention of both by the use of the plate on only one of them, as in the case I have shown you this evening. With the plate screwed firmly in place, the limb may be handled with considerable freedom. The muscles should be brought together (stitching them will seldom be found necessary), the fascial edges should be united and the skin sutured, the wound having of course first been rendered perfectly dry. A light dry dressing is now applied and the limb put up in appropriate splints or in a plaster cast, which shall observe the time-honored and valuable rule of immobilizing one joint on either side of the break. If a cast is used, a fenestrum should be provided over the region of the break so as to give easy access for inspection of the wound. Extension is not necessary.

Now, how long should the plates be left on? Lane claims, I believe, to leave them on permanently and to get primary union in nearly all cases. He attains this result, so he says, by observing rigid asepsis at every stage of the operation, and declares that failure of primary union, and trouble with the plate acting as a foreign body, are due to one cause only, viz.: imperfect asepsis and consequent infection.

To attain the necessary degree of perfection in asepsis, he permits nothing but the instruments to come in contact with the wound; the skin margins are excluded by means of sterile pad coverings held in place by pinch-beetle forceps; the hands of the surgeon and assistants, although gloved, do not touch the wound nor does any part of an instrument that has touched the hand, get into the wound. Specially constructed and strong instruments are used for all manipulations within the wound, the bone ends being grasped, brought together and held by powerful bone holding forceps and the plates being held in place in the same manner while holes are being drilled and screws driven.

This is certainly carrying asepsis to a high stage of perfection, but I doubt if, in spite of all this, he can always avoid foreign body irritation which sometimes produces a profuse pouring out of serum into the wound and may seriously delay and even defeat primary union, and which may ultimately necessitate the removal of the plate.

For my part, in a case of approximately transverse fracture per-

fectly reduced and with the jagged bone ends interlocking, if, after closure of the wound and the application of the retention dressing, I could by some exercise of magic cause the plates and screws to disappear, I would do so, for I think their chief function is to hold things firmly while the dressing is being applied; after that is once done and the necessity for further manipulation removed, the danger of displacement is practically nil.

I have not had enough experience with this procedure as yet to have formed any hard and fast prejudices one way or the other, but I believe that in general and in the long run it will prove better surgery not to leave the plates permanently in place, but to remove them as soon as union is firm enough to permit the necessary manipulation. This could easily be done through a good sized fenestrum in the cast, if a cast is used, at an even earlier date without danger of displacement, the flesh wound being immediately closed again.

In the case I have shown you, removal was planned in advance and quick and sure guidance to the plate was provided by inserting a strip of sterile rubber dam into the wound, one edge of which touched the plate and the other the under surface of the skin, thus preventing union of the soft parts until after removal on the twelfth day. Immediately on cutting the skin sutures, the wound parted and the plate was exposed. Healing of the soft parts after the second opening and closure was quite rapid.

Lane summarizes the advantages of operative treatment as follows:

*First*: It at once relieves the patient of pain due to movement of fragments upon each other.

*Second*: It frees him from the tension and discomfort due to extensive extravasation of blood between and into the tissues.

*Third*: It shortens the duration of the period of disability since union is practically by first intention and consequently very rapid and perfect.

*Fourth*: Lastly, and by far the most important, it leaves his skeletal mechanics in the same condition as before the injury.

---

# RETROVERSION OF THE UTERUS—ETIOLOGY AND SYMPTOMS.*

BY F. J. GAENSLEN, M. D.,

MILWAUKEE.

Displacement of the uterus has been defined as a permanent departure of that organ from its normal position. Temporary changes are constantly taking place due to changes of posture of the body, as well as to changes in form and position of the adjacent bladder and rectum. The above definition probably does not carry much weight with many clinicians who believe that no one position can be regarded exclusively as normal. The Mayos estimate that 26 per cent. of all women have retroversion, and that 5 per cent. of these have symptoms referable to this condition. They believe that retroversion may indeed be the normal position for many. It may be added that not so many decades ago retroversion was considered the normal position because that was the one most frequently encountered at autopsy when the organ had fallen back and the ligaments were relaxed. Anteversion, the condition commonly regarded as normal today, was at that time considered pathological. In view of the above figures it is certainly questionable whether retroversion represents a pathological condition in all cases.

*Anatomy.*—The supports of the uterus it will be recalled are the anterior or vesico-uterine, the posterior, passing from the posterior wall of the uterus and the upper fourth of the vagina to the rectum and sacrum forming Douglas' pouch; the lateral or broad ligaments from the lateral aspects of the uterus to the pelvic walls; the sacro-uterine, from the second and third bones of the sacrum downward and forward to be attached one on each side of the uterus at a point corresponding to the internal os; the round ligaments, usually described as acting as guy ropes, rising from the superior angles of the uterus and attached to the labia majora. To these must also be added the pelvic diaphragm or floor as a whole, which helps to support the weight of the organ. This consists of the peritoneum above, attached at about the level of the internal os, below this extensive taut connective tissue called by the Germans the cardinal ligament, although not so easily demonstrable as the round ligaments, and below this the vault of the vagina. Young ascribes to the utero-sacral ligaments the greater share of weight-bearing of the uterus, claiming that the

*Read before the Brainerd Medical Society, Milwaukee, October 12, 1910.

ligaments act as an ordinary swing, the attachment above being to the second and third sacral vertebrae, and the swing board, the uterine body at the level of the internal os. This point may be regarded as the most fixed point, a pivot as it were, on which the uterus may incline forward or backward or to either side so long as this anatomical relationship is not disturbed by laceration. In the normal position if we regard as such the position most frequently found in the adult virgin, the uterus is a pelvic organ, the cervix reaching to the upper border of the symphysis and the fundus inclining obliquely forward in the middle line.

*Etiology.*—Acute retroversions are described by some as occurring after heavy straining especially such as lifting while in the extreme stooping position in which the fundus is supposed to be crowded below the promontory and unable to regain its position. Such cases undoubtedly are very rare, and if they occur should be easily amenable to treatment. It is stated that perhaps one-sixth of all retroversions are congenital, considering as such cases in virgins or nulipara without other pathological lesion to explain the condition. It must be admitted however, that such figures are very problematical in as much as there are few reliable data regarding the position in the new born. Then too, mechanical influences about to be described, cannot be excluded as factors in the production of these displacements.

Aside from the doubtful acute retroversion and the congenital form just referred to, the great majority of cases of interest in the present discussion are of the acquired form. In the etiology the following factors are of importance. 1. Habitual distention of the bladder. This is supposed to be a very important factor, and bimanual examination with distended bladder will show that the uterus is pushed back very appreciably. 2. Habitual constipation. Here the cervix is crowded forward while the fundus is tilted back with the pivot point at the level of the internal os acting as a fulcrum. During the puerperium these two factors assume very considerable importance. The potential abdominal cavity has been suddenly much increased by the delivery of the child with placenta and amniotic fluid, so that the bladder can assume unusually large proportions. In addition, the sphincter is frequently paretic due to pressure of the head so that frequently, unless the patient is catheterized the bladder may assume very large size. Moreover it is well known that almost all women need purges after delivery, and if these are withheld it is stated that the first evacuation will not take place as a rule before 5 or 7 days. Lack of attention therefore during the puerperium to these details will produce conditions, favoring re-

troversion, especially as the ligaments which have been greatly stretched during pregnancy have not regained their normal tone. Add to this the relatively heavy puerperal uterus and the horizontal position and you have ideal conditions for the development of retroversion. Where there are deep transverse tears in the cervix and laceration of the pelvic floor allowing the pivot point to descend, rectal distention acts at a further advantage in bringing the cervix forward so that retroversion may be acquired in a few days. The round ligaments are probably the most important factors, toward preventing such displacements.

Subinvolution and tight binders or too prolonged confinement in bed will materially aid in bringing about such a result. It is stated by Stratz that in certain parts of Java, backward pressure on the puerperal uterus and retention there in this position, is intentionally practiced to produce retroversion in an attempt to lessen the likelihood of conception. 3. As a third factor in the production of retroversion may be mentioned the contraction of scar tissue following inflammatory conditions behind the uterus. This must be considered as a frequent cause of acquired displacement. As might be expected, they are generally associated with more or less fixation in the abnormal position, usually combined with lateral deviation.

*Symptoms.*—The most frequent symptoms attributed to the condition may be numerated as follows: Backache, bearing down, irritable bladder, dysmenorrhea, nervousness, and possibly constipation and sterility. Even in the relatively small proportion of cases where the mal-position can be held accountable for trouble, not all the symptoms can be considered as due directly to the retro position. Some are merely secondary but cannot as a rule be relieved until the position is corrected.

The strictly uterine symptoms are probably due less to the backward tilting of the uterus, than to the changes in position of the broad ligaments with accompanying torsion of its vessels resulting in varicocele. The arterial supply of course is not interfered with, but the venous return may easily be partially obstructed. Strassmann believes that this will explain the enlarged and congested uterus, with the posterior lip of the cervix especially thickened and bluish and frequently showing erosion. It will also account for the dysmenorrhea characterized by profuse menstruation and increased pain, the latter being due possibly to the fact that the flow is less favored by gravity. The follicles of the congested ovaries are supposed to rupture earlier, and the menstrual reflex to last longer so that the free interval is materially shorter.

The congestion will also account for the frequent catarrhal endomentritis, the engorged mucus membrane secreting more mucus. Strassmann believes further that a retroversion at first freely movable, may become fixed by adhesions resulting from the extravasation of an increased amount of blood from ruptured follicles in the congested and prolapsed ovaries. In unruptured follicles the increased transudate may also result in hydrops of the follicles, resulting in cystic degeneration of the ovaries.

Sterility has been attributed to the sealing of the internal os by contact with the anterior vaginal wall. Vesical disturbance may be due to lack of bladder support behind, while from the weight of the uterus there may be a sensation of pressure on the rectum, while more rarely constipation results. The back pains are considered the result of abnormal pressure on the peritoneum and sacral plexuses. These pains however, are so frequent in other conditions that it is very difficult in a given case to bring them into definite relationship with retro displacement. Reynolds and Lovett within the past year have contributed a valuable paper on "Backache, from static not pelvic disorder" in which they call attention to the frequent occurrence of backache in association with over strained sacro-iliac synchondroses, due to faulty attitude and improperly fitting corsets. Static backaches they say are produced when the center of gravity is thrown forward by increasing the strain on the sacro-iliac articulations and may be relieved by wearing suitable corsets throwing the center of gravity backwards and splinting the over strained and irritable muscles.

Nervous symptoms are frequently attributed to pelvic disorders. Dercum, with a view of determining the frequency, with which nervous symptoms occur in retro displacements analyzed some 600 cases and found that such mal-positions are more frequently without, than with nervous symptoms. This of course is in harmony with the statement in the beginning of the paper that only a minority of retro positions cause symptoms of any kind, and does not prove that in some cases nervous symptoms may not result. Nevertheless, the expressed conviction, that operations on the pelvis or other viscera, for the relief of nervous symptoms have no justification, may be emphasized.

Baldy holds as a fundamental fact that retro positions of the uterus are mostly coincident with other lesions, and where such is the case, the symptoms almost universally come from the associated disease. He thinks the expression, the "treatment of retro position" conveys a mistaken idea, and that it should be the treatment of conditions in connection with which retro displacement of the uterus occurs as an incident.

*Diagnosis.*—The diagnosis of course is very readily made by bimanual examination under anesthesia if necessary, and requires no further comment. The difficulty arises in distinguishing between symptoms referable to the condition, and those in which retro displacement is merely an incidental condition.

*Prophylaxis.*—Among points in prophylaxis may be mentioned, repair of laceration immediately after delivery, proper attention to bladder and rectum during the puerperium, and final examination at the close of it followed by suitable treatment in case misplacement is discovered.

This final examination has been objected to on the ground that it may direct the attention of a nervous patient to a harmless condition and that if real trouble arises, the patient will probably come for treatment. No doubt there is some truth in this and while it may be advisable in selected cases to abstain from determining the exact status before discharging the patient from our care, nevertheless I think it a good rule to do so, because at this time better than at any other can correction of an abnormal position be accomplished. In regard to early rising after childbirth, there is much difference of opinion. Heyman's paper in which he tries to show that retro positions are not increased by early rising is not conclusive in as much as no preliminary examinations were made to establish the percentage of occurrence before delivery. It would seem reasonable to avoid too early rising, for the reason that the vaginal canal is wider, laceration less completely healed, the uterus is larger and the pressure on the relaxed pelvic floor which has not as yet regained its normal tone would appear to make the descent of the uterus easier, and in that way at least favor retro position.

---

## CLINICAL DEPARTMENT.

# REPORT OF TWO CASES OF TRAUMATIC TETANUS WITH RECOVERY.

BY M. W. DVORAK, M. D.,

LA CROSSE.

The following report is of interest, because it demonstrates the value of Antitetanic Serum as a prophylactic, and possibly a curative agent.

CASE 1, E. S. M., age 33, La Crosse. Admitted to hospital Feb. 1, 1907. While tamping a dynamite charge for blasting purposes it exploded, forcing a rod used for this purpose upward and tearing away a portion of the outer side of forearm; carrying away six inches of the ulna and attached muscles, opening of elbow joint, and tearing away middle finger.

Treatment. The wound was thoroughly cleansed, joint closed and sutured with free drainage. 30 c.c. Antitetanic Serum were given at this time. Our notes of the case follow. Eight days later, the temperature has ranged from 99.5 to 101.6 F. Patient feels very well, although the wounds are quite painful. There is some discharge of pus. Feb. 16th. Restless, nervous. Temperature 102.3° last evening, this morning 101.5° F. Complains of soreness and stiffness of left leg and entire right lower extremity. A tonic contraction of the muscles of both extremities occurs if any voluntary motion is attempted; this also occurs on passive motion but is less marked. These contractions last only a few seconds, then relax. The muscles of jaw are stiff and sore, and the patient complains of difficulty in swallowing. All reflexes are markedly exaggerated and there is marked hyperesthesia of both extremities. 30 c.c. of Antitetanic Serum were given on this day. Feb. 21, All spasms have disappeared. There still exists a marked exaggeration of the reflexes and hyperesthesia. Urine and stools are passed involuntarily for the last 6 days. A week later improvement set in and he went on to gradual recovery, the wounds, however, still discharging pus. Seven months later, Sept. 21, 1907, wound still discharging. Examination at this time reveals a splinter of wood buried in the palm of hand which was not found at the time of injury. This was removed and the wound healed promptly. We concluded that it was by this piece of wood that the infection was carried in, and that if no serum had been given at the time of the injury the result would probably have been more serious.

CASE 2, F. K., age 12. La Crosse. Entered hospital July 12, 1910.

July 1st stepped on a nail. The wound pained him a little for a couple of days, then improved and he had no more trouble. Ten days later complained of pain and stiffness in jaws; this became worse and next day called in a physician who prescribed some medicine for him.

In spite of this the pain and stiffness increased in severity, growing very bad on the third day; on this day also first complained of pains in his arms, legs and back, and the father noticed that he had spasms of arms and legs and that there was some fixation of his mouth. Came to hospital and consulted Dr. Evans.

Examination showed heart, lungs and urine normal. Boy, who is well nourished, lies in bed in opisthotonos. Face is flushed. Mentally is bright and clear. Pulse regular and in good volume. Cannot rise nor turn in bed because of rigidity of back and pain in extremities. This rigidity is practically constant but becomes more marked on the least disturbance of the bed clothing. Every few minutes he has a general contraction of muscles of body more marked in those of back and extremities. Never loses consciousness. Reflexes all increased. Pupils normal.

Treatment. At 6 p. m. received 1,500 units Serum and during the night between 7 p. m. and 7 a. m. 9,000 more. The old scar where nail had entered was widely opened, cleansed, and drained. July 14, swallowing which had been difficult was a little easier. Has frequent spasms and a great deal of pain. July 15, 3,000 units more given; the day following is less excitable. Jaws are somewhat relaxed. Convulsions not as frequent. July 16 and 17 had only six spasms. July 19, 3,000 units more given. July 19 to 22 had spasms every two hours. Urine and stools are passed involuntarily. July 22, 3,000 more. July 26, no spasms. Eating well. Less pain and rigidity. Temperature which has ranged from 101° to 103°, has left him and now for two days has been normal. Discharged from hospital July 31, 1910. Improved rapidly after this date and in three weeks was able to be up and about, walking with some difficulty, but says this is improving. A month later when seen again and is entirely well.

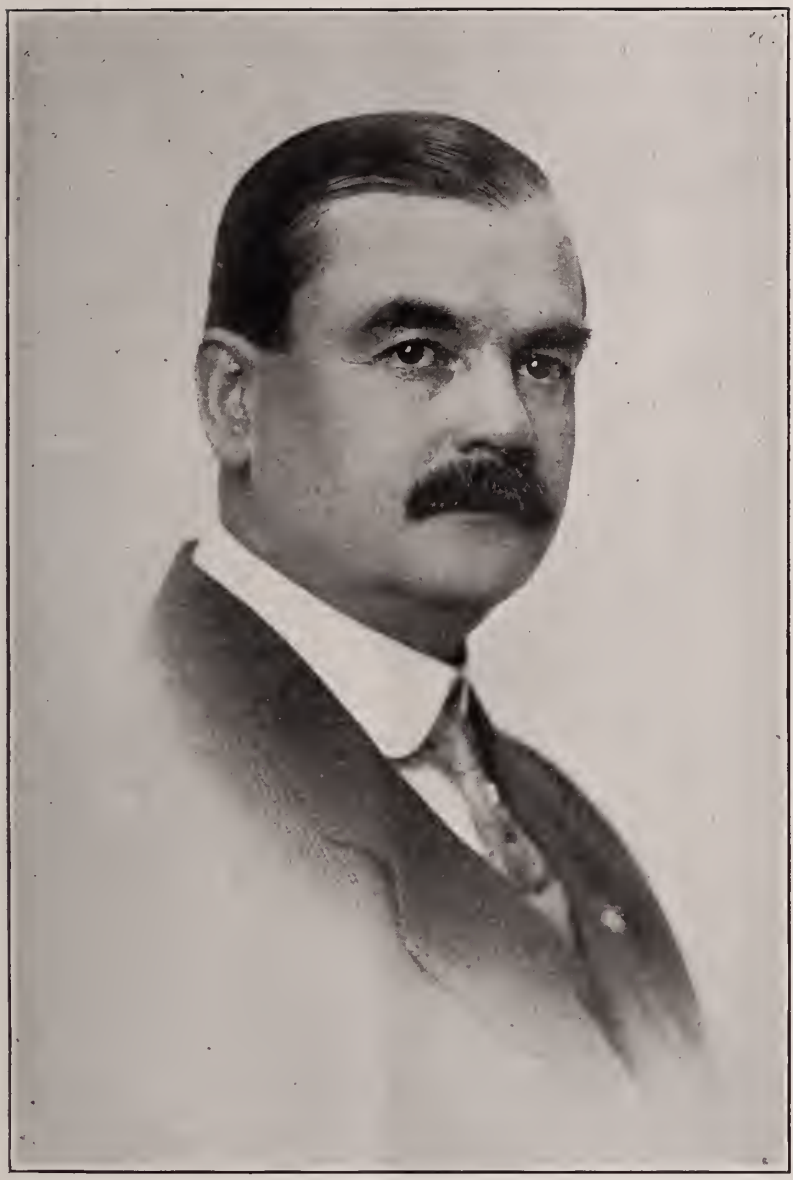
## JOHN M. DODD, M. D.,

PRESIDENT STATE MEDICAL SOCIETY OF WISCONSIN, 1911-1912.

Dr. John M. Dodd, of Ashland, who was elected president of the State Medical Society at the recent meeting at Waukesha was born at Waynesburg, Pa., in 1866. Left an orphan at the age of two years he spent his early boyhood on a farm, served a three years apprenticeship at the carpenter trade, taught school two years, and still was able to graduate from the Starling Medical College, Columbus, Ohio, in 1889, at the early age of twenty-two.

After graduation Dr. Dodd practiced at Rhinelander for a year and a half before making his permanent home in Ashland. He was instrumental in organizing the Ashland County Medical Society and served for several years as its secretary and finally as its president. When the State Medical Society was reorganized seven years ago Dr. Dodd was made Councilor for the 11th District and has served at that capacity ever since.

While Dr. Dodd has been prominently identified with hospital work in Ashland during his entire residence there his activities as a public spirited citizen in connection with various enterprises tending to the welfare and upbuilding of the community have been recognized by his election to the presidency of the Ashland Advancement Association for the past three years and finally by his election as Mayor of Ashland in April of this year.



JOHN M. DODD, M. D.

# WISCONSIN MEDICAL JOURNAL

OFFICIAL PUBLICATION OF THE STATE MEDICAL SOCIETY OF WISCONSIN.

A. W. MYERS, M. D., Editor.
141 Wisconsin Street, Milwaukee.

J. P. McMAHON, M. D., Managing Editor.
141 Wisconsin Street.



Publication Committee:

A. J. Patek, M. D., Milwaukee. G. E. Seaman, M. D., Milwaukee
O. H. Foerster, M. D., Milwaukee. C. S. Sheldon, M. D., Madison.
S. S. Hall, M. D., Ripon.

Collaborators:

The Council.

M. R. Wilkinson.....Oconomowoc
G. Windesheim.....Kenosha
F. T. Nye.....Beloit
W. Cunningham.....Platteville
J. V. Mears.....Fond du Lac
H. W. Abraham.....Appleton
Edward Evans.....La Crosse
T. J. Redelings.....Marinette
O. T. Hougen.....Grand Rapids
R. U. Cairns.....River Falls
J. M. Dodd.....Ashland
H. E. Dearholt.....Milwaukee



Annual Subscription. - - - $2.00. Single Copies, - - - - - $0.20

Address all business communications to
WISCONSIN MEDICAL JOURNAL,
504 Goldsmith Building, Milwaukee

[Entered as second class matter, June 30th, 1903, at the Post Office at Milwaukee, Wis., under Act of Congress, March 3rd, 1879.]

Vol. X. JUNE, 1911. No. 1


## EDITORIAL COMMENT.

### TETANUS AND FOURTH OF JULY INJURIES.

Sanity in Fourth of July observances should include proper care of the injured if injured there must be. Gradually the truth is beginning to prevail as to the cause and prevention of tetanus.

Let us be frank enough to admit that every case of tetanus is due to neglect on the part of some one and in addition let us be conscientious enough to prevent its occurrence in every case we treat.

Nearly 90 per cent of the Fourth of July tetanus cases last year were the result of blank cartridge wounds.

Nearly 15 per cent of the blank cartridge injuries resulted in tetanus.

Let us bear these facts in mind when we are called upon to treat injuries of this character and let us never forget that the prevention of tetanus by the prompt injection of antitoxin is easy and certain while its cure when once developed is difficult and often impossible.

## THE WAUKESHA MEETING.

Every year when the Annual Meeting is ended and we sit down to think it over there is a tendency to think that the one just finished was the best that ever happened. This has occurred before and it probably will again. But this year the meeting at Waukesha *really was* the best we have ever had. Charley Sheldon said so (and he ought to know), and everybody who was there said the same thing.

The weather was perfect, the meeting-place was ideal, the arrangements were excellent, and the attendance beat all records.

The papers were good and there was more discussion than last year, but we are still rather weak in that direction. Next year let us endeavor to draw out even a fuller discussion of the papers. It is the most important part of the meeting in some respects.

The Annual Address of the President, Dr. Caples, is published in full in this issue of the Journal and should be carefully read by every member of the Society.

The Address in Medicine by Dr. Cabot and that in Surgery by Dr. Goldthwait were enjoyed by all. They were of a most helpful, stimulating, practical character and were received with the greatest enthusiasm. The abstracts of these papers which appear in the digest of the proceeding really give no adequate idea of their character, but they will be published in full in the near future. The Society was most fortunate in having as its guests two men of such distinguished ability in their special fields.

The social features of the meeting in no way fell short of the standard set by the scientific program. Everybody had a good time.

The meeting of the Association of County Secretaries and State Officers kept up the pace set by Head Booster Sleyster last year and proved to be another great success. Every member of the State Society profits by these meetings and they are more than fulfilling the hopes of their originators.

The Committee on Arrangements is to be congratulated on the successful handling of the meeting. There was not a hitch of any kind and that means a great deal of hard work and careful planning for weeks beforehand.

And the city of Waukesha deserves our thanks for the generous spirit of hospitality with which we were received.

The election of Dr. John M. Dodd of Ashland to the presidency for the coming year is one for which the Society should congratulate itself. Dr. Dodd has shown his devotion to his profession by many years of faithful work in various capacities in his county and district and his executive ability has been amply demonstrated in his public activities.

After such a meeting and under such guidance the State Medical Society of Wisconsin may well look forward to a year of unusual prosperity.

## POST GRADUATE INSTRUCTION IN WISCONSIN.

No one who gives any thought to the question of modern medical training can fail to be impressed with the necessity for constant mental stimulation obtainable at the large centers of medical thought both here and abroad. Advances in Medicine, using the word in its broadest meaning, are so rapid that the graduate of even five years ago who does not keep himself conversant with medical literature must find himself losing ground to the young members who yearly enter upon the practice of medicine.

Schools where Post Graduate courses are given to practitioners are located in many of our large cities. Some are conducted by men connected with a regular school, others are run independently as schools for graduates in medicine only.

No one questions the great help which these schools give to the men who visit them. Even the occasional visit to a clinic is instructive and most helpful as an incentive to do just a little better work.

In Wisconsin we have no such Mecca for our own men. It is most fitting that in Milwaukee, the largest and most important city, there should be held post-graduate clinics where men who come to Milwaukee could gather both profit and pleasure from a visit.

In casting about for a place most suitable and best equipped for the work the Milwaukee County Hospital at Wauwatosa, a half-hour's ride from the heart of the city of Milwaukee, seems the place.

The hospital authorities would like to feel that the large well-equipped hospital was doing the greatest amount of good not only in its own community but in the state, and to this end it is proposed to start next fall a series of clinics at the hospital conducted by staff members and others who may be invited to conduct clinics, weekly, semi-weekly, or as often as seems necessary. No definite plans have

as yet been formulated as it is not known just how much favor such a proposition would meet from men all over the state.

Should it be found that the idea is favorably received, active work will be at once begun so that all will be in readiness for the work in the fall.

It is tentatively proposed to publish in the Wisconsin Medical Journal every month the course of clinics for the current month and to post notices weekly at some central locations in the city of Milwaukee.

Correspondence and suggestions are solicited. The aim is to make the hospital influence worth something to the state and to aid in the good cause of medical learning.

## COD LIVER OIL AND PHOSPHORUS IN RICKETS.

The results of two series of investigations have recently been published which throw new light on an interesting therapeutic problem. The first of these is that of Schabad who by means of metabolism experiments investigated the effects of various substances upon calcium retention in rachitis; the second is a clinical study by Rosenstern who by ingenious measurements watched the effect of cod liver oil with phosphorus and of cod liver oil alone on marked cases of rickets, and also studied their effect on the increased electrical irritability of the tetanoid states which so often accompany rickets. Schabad came to the conclusion that cod liver oil was the substance which caused the increased calcium retention and that phosphorus by itself had no such effect. But he observed that the addition of phosphorus to the oil increased its favorable action so that a distinct beneficial effect followed the use of a smaller dose of the combination than of the oil alone.

Rosenstern's clinical studies brought him to exactly the same conclusion. Under the influence of this medication the repair of the bone lesions was very rapid. And in comparing the effects upon the electrical hyperexcitability he found that it required two and a half times as much of the cod liver oil alone to produce a certain result as of the cod liver oil plus phosphorus. The effect of phosphorus dissolved in other oils was practically nil. It should be noted that it was phosphorus itself which was used in this work, not the phosphates nor the hypophosphites which have been shown to be without effect in rickets.

It goes without saying that the conditions leading to rickets,—improper feeding methods, poor ventilation and lack of sunlight, insufficient exercise,—must be corrected before good results can be obtained by any medication.

## THE "MEDICAL TRUST."

During the latter part of May some of the newspapers of the state lashed themselves into a frenzy of excitement over a bill known as 602S, which was introduced into the legislature at a late hour and had for its apparent object the regulation of certain irregular practices by itinerant vendors of medicines. It was asserted by some newspapers that this was an insidious attempt to create a new trust, a "doctor's trust, before which the steel trust and Standard Oil will pale into insignificance." Others thought it was an attempt to "get" John Till and moralized over the wickedness of the persecution of this eminent citizen. But whatever the object was it was evident to the newspapers that something criminal was going forward and that the organized medical profession was at the bottom of it.

Unwilling to have anything criminal going on from which we were left out an attempt was made to get in communication with the villains of the plot, but in vain! The State Board of Medical Examiners knew nothing about the bill, the State Board of Health seemed to have no interest in it, the Legislative Committee of the State Medical Society was completely in the dark with regard to it. In fact, the ignorance of the organized medical profession in regard to this bill was so complete that it was even suggested by some that the bill might have been introduced by some of the members of the "League for Medical Freedom" with the idea of getting up a great excitement about it and trying to throw the discredit for its introduction upon the medical profession.

The bill died a rapid and almost painless death and after its demise the fact transpired that the bill had been prepared by a member of the legislature who is not a medical man, and apparently without consultation with medical men.

This legislator had seen the harm done by travelling medical fakirs and his desire was to have a law passed which would make it possible to bring them before a higher court than the justice court where they usually escape punishment when arrested. He was honestly trying to protect his constituents. It may be that the bill was faulty but its purpose was a good one. But, good or bad, the organized medical profession had no hand in it.

Some day—when we are all dead—the public may discover that the medical profession is not a pirate crew. In the meantime let us try to get a little fun out of the talk about the "Medical Trust." Surely, "it is to laugh!"

## NEWS ITEMS AND PERSONALS.

**Dr. F. S. Luhman,** Manitowoc, was re-elected county physician on May 19th.

**Marriages.** Dr. C. E. Perry, Milton and Miss Winifred Carr Macomber, Tomahawk, May 30th.

**Dr. P. G. McGill,** Superior, city health officer, had two ribs broken in an automobile accident.

**Dr. Herman Hendrickson,** Green Bay, underwent an operation for appendicitis on May 18th. He is convalescing.

**Dr. Gustav Bjorkman,** Racine, who has been dangerously ill with blood poisoning for several weeks, has recovered and is able to resume his practice.

**Dr. I. G. Babcock,** Cumberland, has resigned the office of city physician and health officer and Dr. W. B. Hopkins has been appointed city physician and Dr. D. Madill health officer in his stead.

The issue of **Puck** for June 7th has one of the best cartoons on the subject of antivivisection that has ever been published. Puck is making a splendid fight for sanity and intelligence in the consideration of animal experimentation.

**Removals.** Dr. F. W. Brownell, New London to Three Lakes.
Dr. F. L. Tracey, Janesville to Watertown, Ill.
Dr. H. H. Christofferson, Loyal to Colby.
Dr. E. P. Andrews, Portage to Lodi.
Dr. William Lyon, Fond du Lac to Eden.
Dr. Sherman E. Wright, Marinette to Portland, Ore.
Dr. A. C. Radloff, Eden to Milwaukee.
Dr. H. J. Westgate, Ingram to Rhinelander.
Dr. A. J. Berger, Chilton to Marshall, Minn.
Dr. Arthur J. Knauf, Milwaukee to Sheboygan.
Dr. E. C. Howell, Fennimore to Milton.

Dr. F. G. Hopkins, Valders, has disposed of his practice to Dr. J. L. Shaw of Chicago, and will leave shortly for Germany to take a post-graduate course.

Dr. L. F. Bennett, a practicing physician of Beloit for twenty-two years will dispose of his practice and remove to Spokane, Wash., about August 1st.

**Deaths.** Dr. John J. Selbach of Eau Claire died suddenly of heart failure on May 25th.

John Joseph Selbach was born in Germany, August 2d, 1864. He came to America thirty years ago and had been practicing medicine in Eau Claire for twenty-two years. He was a member of the Eau Claire County and State Medical Societies.

Dr. Charles H. Moore, president of Oakfield village and a well known physician of Fond du Lac County died on June 2d at his home in Oakfield after a year's illness of tuberculosis. He was 46 years of age.

Dr. Moore was the son of Dr. and Mrs. William Moore and was born near the village of Oakfield on March 30, 1865. He attended the Oakfield schools and later went to the University of New York, from where he graduated in 1888. After graduation he practiced medicine in Waupun for two years, moving to Oakfield in 1890, and had resided there until his death. He had served as clerk of the school board for several terms and was serving his second term as president of the village.

*Circular issued by the American Orthopedic Association and the American Pediatric Society in reference to acute epidemic poliomyelitis, and addressed to health authorities and boards of health.*

Anterior poliomyelitis is, so far as known, a communicable disease, being communicated from one patient to another and also by means of a third person. It occurs in epidemics and tends to spread along the lines of greatest travel. There is reason to believe that it is prevented from spreading by quarantine, and with the very great prevalence of the disease in the summer of 1910 it is the opinion of this committee that it is essential that it should be made a reportable disease in all states in order that its presence may be detected and its spread guarded against.

Of particular significance are the so-called abortive cases, where indefinite ailments occur in children in communities where frank paralysis also exists. These abortive cases of infantile paralysis are undoubtedly a source of infection, and their record and study is of much importance. In a community where cases of infantile paralysis occur cases of illness with sudden onset of fever and meningeal symptoms should be closely watched and regarded as possibly infectious. In such cases even recovery without paralysis does not establish the fact that the case was not abortive infantile paralysis.

All cases of infantile paralysis should be strictly quarantined, sputum, urine and feces being disinfected, and the same rigid precautions being adopted as in scarlet fever. This quarantine should, in the opinion of the committee, last for four weeks in the absence of definite knowledge as to when the infection ends. Children from infected families should not be allowed to go to school until the quarantine is abandoned. The transportation or transfer of acute cases in public conveyances should be strictly forbidden. It would be very desirable to adopt provisional quarantine measures in suspicious cases in a community where an epidemic prevails. The report of all cases of infantile paralysis to the public health authorities should be enforced by law, and all deaths from this cause should be properly described and registered. A careful study of epidemics by public health authorities is strongly advised.

(Signed) ROBERT W. LOVETT, M. D., *Chairman.*
HENRY KOPLIK, M. D.
H. WINNETT ORR, M. D.
IRVING M. SNOW, M. D., *Secretary.*

## NATIONAL CONFEDERATION OF STATE MEDICAL EXAMINING AND LICENSING BOARDS.

The Twenty-first Annual Convention of the National Confederation of State Medical Examining and Licensing Boards was called to order at the Congress Hotel, Chicago, Ill., February 8, 1911, by the President, Dr. Joseph C. Guernsey. Dr. George W. Webster of Chicago, Chairman of the Committee

on Arrangements, delivered a cordial address of welcome which was ably responded to by Dr. Lee H. Smith of Buffalo.

The President delivered the annual address, choosing for his subject "Medical Licensure." The report of the Secretary-Treasurer, Dr. George H. Matson, was read, audited and approved. The report of the Committee on Clinical Instruction by Dr. Henry Beates, Chairman, and that on Materia Medica by Dr. Murray Galt Motter, were read, referred for publication and the committees continued. The report of the Committee on Mr. Flexner's paper published in the proceedings for 1910 was read by Dr. N. P. Colwell. After an extended discussion the report was adopted as read and the committee discharged.

The Symposium on "State Control of Medical Colleges" was discussed from the viewpoints of State, Law, The Medical Colleges, State Medical Examining and Licensing Boards and the Medical Profession. From the viewpoint of the State Charles William Dabney, Ph.D., L. L. D., Pres. of the University of Cincinnati, read a paper in which he contended that the State could control and conduct medical colleges more efficiently than corporations and private individuals. From the same viewpoint Mr. Abraham Flexner of the Carnegie Foundation for the Advancement of Teaching, New York City, read a paper on "The Duty of the State in the Control of Medical Colleges," advocating this system. From the viewpoint of the Law, Hon. Charles Alling, Jr., Chicago, read a paper giving his opinion that the courts would uphold the system. Dr. Arthur Dean Bevan, Chicago, discussed the question from the viewpoint of the Medical Colleges, setting forth the advantages of State Control. (a) as regards uniformity of requirements and methods, (b) as giving adequate financial support. From the same viewpoint F. C. Waite, A. M., Ph. G., Cleveland, forcefully and hurriedly pointed out the evils inherent under the present system and expressed the opinion that the spirit of competition and commercialism would be eradicated if the state controlled the medical colleges. Dr. Frank Winders, Columbus, O., read a paper in which he contended that with aid rendered by the State, medical education would become more efficient by having all teachers receive a compensation commensurate with their labor, and by having a larger number devote their entire time to teaching than now obtains. From the viewpoint of The State Boards of Medical Examiners, Dr. Edward Cranch, Erie, Pa., declared that the medical boards could more efficiently enforce the laws regulating the practice of medicine and the requirements of the board if medical education were under state control. From the same viewpoint Dr. James A. Duncan, Toledo, presented a paper on the subject, "If Medical Colleges were under State Control, would the state medical boards be enabled to determine more fully the Standing?" which question he answered in the affirmative. For the Medical Profession Dr. Royal S. Copeland, New York City, said that if medical colleges were under state control, the medical profession would be more uniformly and efficiently educated and trained than by the present system. Dr. Horace G. Norton, Trenton, N. J., presented a paper in which he held that since the medical colleges are the source of the medical practitioner upon which devolves the care and the welfare of the people, they should be under State Control. Special papers on the following subjects were presented. "The necessity of establishing a rational curriculum for the medical degree" by Dr. Henry Beates, Philadelphia, "Some Thoughts

on the Supervision of Medical Colleges and the Conducting of State Examinations" by Dr. James A. Egan, Springfield, Ill.

The attendance was the greatest in the history of the Confederation, and the enthusiasm which began at the opening continued throughout the session. All papers were earnestly and intelligently discussed, the interest becoming so intense that it was necessary to limit the period of the discussions.

The Oregon State Board of Examiners, the Louisiana State Board of Medical Examiners (Regular), Dr. R. S. Copeland, New York City; Dr. James H. McDonald, Pittsburg; Dr. P. F. Lawrence, Columbus, and Dr. C. M. Hazen, Bon Air, Va., were admitted to membership in the Confederation.

The following officers were elected: President, Dr. Charles A. Tuttle, New Haven, Conn.; First Vice-President, Dr. James A. Egan, Springfield, Ill.; Second Vice-President, Dr. A. B. Brown, New Orleans, La.; Secretary-Treasurer, Dr. George H. Matson, Columbus, Ohio; Executive Council, Dr. N. R. Coleman, Columbus, Ohio; Dr. James A. Duncan, Toledo, Ohio; Dr. Charles H. Cook, Natick, Mass.; Dr. Joseph G. Guernsey, Philadelphia, Pa.; Dr. W. Scott Nay, Underhill, Vt.

---

**Ophthalmic Herpes Zoster with Homolateral Isolated Paralysis of the Abducens.** LANGENHAN, DR. (From the eyeclinic of Prof. J. von Michel in the University of Berlin. Zeitschrift für Augenheilkunde, XXIII, Juni 1910, p. 522). A man, aged 60, who gave a luetic history and positive Wassermann's reaction, was seized with violent neuralgia of the first branch of the left 5th nerve. After a few days characteristic hemorrhagic herpes vesicles developed on the left side of the forehead extending from the median line to the skin of the head, the left eyebrow and the outer commissure of the lids, with considerable edema of the upper lid and lacrimation, i. e. in the area supplied by the frontal (supraorbital, infratrochlear), and lacrimal nerves. 5 days later a complete paralysis of the left abducens had developed with edema of the lower lid and a new eruption of herpes vesicles at the inner angle and the left side of the nose in the area of the infratrochlear nerve. The sensibility in the field of the 1st and 2nd branches of the 5th nerve was very much diminished. The eyeball remained intact. Intraocular tension was lowered, preauricular gland swollen. Under aspirin, iodide of potash and electricity, the vesicles dried up within 5 weeks and left pigmented scars, the sensibility of the skin returned and the paralysis of the abducens improved, so that after 2 months double images were noticed only in extreme lateral position.

The fact that the cornea was not affected spoke against the assertion of Hutchison, that the eruption of herpes on the cornea depends on an affection of the nasociliary nerve, as the long root of the ciliary ganglion and the long ciliary nerves arise from the nasociliary branch. The author considered the affection of the first branch of the 5th nerve as a luetic neuritis and perineuritis which was at first localized to the frontal and lacrimal branches and spread to the nasociliary branch and the near abducens.—C. Zimmermann.

---

# THE STATE MEDICAL SOCIETY OF WISCONSIN.

ORGANIZED 1841.

## Officers 1911-1912.

J. M. DODD, Ashland, President.

T. J. Redelings, Marinette, 1st Vice-President.

C. A. Armstrong, Boscobel, 2d Vice-President.

H. F. Dearholt, Milwaukee, 3rd Vice-President.

CHAS. S. SHELDON, Madison, Secretary.

S. S. HALL, Ripon, Treasurer.

ROCK SLEYSTER, Waupun, Assistant Secretary.

A. W. GRAY, Milwaukee, Chairman Program Committee.

G. E. SEAMAN, Milwaukee, Chairman Medical Defense Committee.

A. W. GRAY, Milwaukee, Chairman, Committee on Public Policy and Legislation

## Delegates to American Medical Association.

J. T. Pember, Janesville. C. S. Sheldon, Madison. A. H. Levings, Milwaukee.

## Alternates.

W. T. Murphy, Waukesha. B. M. Caples, Waukesha. M. P. Ravenel, Madison.

## Councilors.

TERM EXPIRES 1917.

1st Dist., M. R. Wilkinson, - Oconomowoc
2nd Dist., G. Windesheim. - - Kenosha

TERM EXPIRES 1912.

3rd Dist., F. T Nye, - - - - Beloit
4th Dist, W. Cunningham, - - Platteville

TERM EXPIRES 1913.

5th Dist., J. V. Mears, - - Fond ku Lac
6th Dist., H. W. Abraham, - - Appleton

TERM EXPIRES 1914.

7th Dist., Edward Evans, - - La Crosse
8th Dist,, T. J. Redelings, - - Marinette

TERM EXPIRES 1915.

9th Dist., O. T. Hougen, - - Grand Rapids
10th Dist., R. U. Cairas, - - River Falls

TERM EXPIRES 1916.

11th Dist, J. M. Dodd, - - - Ashland
12th Dist., H. E. Dearholt, - Milwaukee

## NEXT ANNUAL SESSION, WAUSAU, 1912.

The Wisconsin Medical Journal, Official Publication.

# SOCIETY PROCEEDINGS.

## SIXTY-FIFTH ANNUAL MEETING OF THE STATE MEDICAL SOCIETY OF WISCONSIN, WAUKESHA, JUNE 7, 8 AND 9, 1911.

### DIGEST OF MINUTES OF THE HOUSE OF DELEGATES.

Meeting of the House of Delegates called to order by the President at 8 P. M., June 6, 1911. The roll was called showing a quorum present.

The report of the Committee on Medical Defense was read by Dr. Patek, showing remarkable success in this work. Report accepted.

Dr. Patek presented report of Committee on Publication showing reduction in cost of Journal to the Society from 10c to 3⅓c per copy. Report accepted.

Report of Committee on Necrology was received, showing that the society lost through death during the past year seventeen members.

Dr. A. W. Gray presented the report of the Committee on Public Policy and Legislation. Report accepted, filed and committee continued.

Dr. B. M. Caples presented the report of delegate to National Legislative Council which took action looking toward increase of efficiency in medical schools; taking definite action to secure desirable legislation; deploring the action of Columbia University in establishing a chair of optometry. Report accepted.

The Secretary read the report of delegate to the Council on Medical Education of the A. M. A.; and the report of the Committee to act with board of public instruction, which were accepted.

The report of committee to draft form of reports for county secretaries and councilors was postponed.

Report of Chairman of Council was read by the Secretary. The report called especial attention to the "commission" evil. Report accepted.

Reports were received from the various councilor districts except 1, 5 and 10.

The Treasurer's report was presented showing balance on hand to the credit of the Society of $3726.99, and to the credit of the defense fund of $2131.63. Reports accepted.

The Secretary read his report showing paid memberships for 1911 of 1493; the satisfactory results of plans for medical defense; the able management of the Journal (which however is not utilized as it should be by the membership at large): that we are justified in taking an optimistic view of the situation; that the meeting of county secretaries proved valuable; and generally that scientific interest and professional spirit are on the uplift. Report accepted.

Dr. R. G. Sayle's resignation as alternate delegate to the A. M. A. was accepted. Dr. M. P. Ravenel was chosen as alternate in his place. Dr. B. M. Caples was elected as alternate to Dr. Cunningham.

Dr. J. T. Pember was chosen as delegate and Dr. W. T. Murphy as alternate to the A. M. A. for two years, beginning in 1912.

Dr. G. Windesheim and Dr. M. R. Wilkinson were elected councilors for the second and first districts to succeed Dr. Windesheim and Dr. Sears.

The committees on Public Policy and Legislation, Prevention of Tuberculosis, Medical Education, Necrology, and to act with Board of Public Instruction of A. M. A., were elected.

Delegate to National Legislative Council A. M. A. and delegate to Council on Medical Education A. M. A. were elected.

The following Committee on Nominations was chosen: 1st district, H. B. Sears; 2d district, W. A. Fulton; 3d district, L. R. Head; 4th district, Chas. Armstrong; 5th district, S. S. Hall; 6th district, H. W. Abraham; 7th district, Henry A. Jegi; 8th district, R. C. Faulds; 9th district, Joseph F. Smith; 10th district, A. Egdahl; 11th district, J. C. Wright; 12th district, R. G. Sayle.

Motion unanimously carried to send Secretary C. S. Sheldon as the representative of the Society to Los Angeles and pay his expenses. Dr. Sheldon declined.

A motion by Dr. Hall to make provision for honorary membership was referred to the council.

A resolution presented to the House of Delegates of the A. M. A. that membership in the county society constitute membership in the A. M .A. was referred to the council.

Adjourned.

JUNE 7, 1911, 10:45 A. M.

Meeting called to order by the President. The roll was called and quorum present.

Minutes of last meeting read and approved.

Adjourned to 12 noon, June 8th.

THURSDAY, JUNE 8, 1911, 12:45 P. M.

Meeting called to order by the President. The Secretary called the roll and a quorum was found to be present.

The report of the nominating committee was adopted electing the following officers for the ensuing year:

President, Dr. J. M. Dodd, of Ashland; First Vice-President, Dr. T. J. Redelings, of Marinette; Second Vice-President, Dr. C. A. Armstrong, of Boscobel; Third Vice-President, Dr. Hoyt E. Dearholt, of Milwaukee.

The report of same committee was adopted naming the following physicians as a list for the governor to choose members of the State Board of Medical Examiners from: S. D. Beebe, L. R. Head, T. J. Redelings, J. M. Dodd, W. A. Fulton, H. W. Abraham, H. A. Jegi, E. B. Brown, Joseph F. Smith, F. G. Connell.

A motion was unanimously carried endorsing resolution of the A. M. A. condemning illicit sexual intercourse.

A resolution opposing the licensing of optometrists was unani-

mously passed, copies to be sent to the proper legislative committee and to the Governor.

Dr. Cunningham gave notice of proposed amendment to constitution, so as to include an honorary membership.

Dr. G. Windesheim, Kenosha: I move that the House of Delegates of the State Medical Society of Wisconsin, believing that a necessity exists for the reorganization of the administration of public health, medical education and the licensing of candidates to practice medicine, respectfully requests the State Board of Health, the Wisconsin State Board of Medical Examiners, and the several state medical societies, to appoint a committee of three members from each organization to meet with the Committee on Public Policy and Legislation of this society, for the purpose of discussing the best means by which this reorganization may be brought about, and for the further purpose of advancing such legislation as may be deemed desirable and expedient.

Seconded by Dr. Wilson Cunningham.

Unanimously carried.

Adjourned.

FRIDAY, JUNE 9, 1911, 8:30 A. M.

Meeting called to order by President. Minutes were read and approved.

U. S. Senate Bill 2117 increasing salaries of medical officers of the public health and marine hospital service, unanimously endorsed.

The constitution was amended so as to permit honorary membership in the state society.

Wausau was selected as the next meeting place.

Recommendation was unanimously made to the council that the treasurer's salary be raised from $150 to $200 per annum.

A unanimous rising vote of thanks was extended to program committee and especially to its chairman Dr. A. W. Gray, and it was unanimously recommended that he be continued as chairman for the next year.

Adjourned sine die.

## REPORT OF PUBLICATION COMMITTEE OF THE WISCONSIN MEDICAL JOURNAL.

Statement of earnings, equipment, expenses and circulation, June 1, 1910, to June 1, 1911.

### TOTAL EXPENSES.

| | | |
|---|---|---|
| Equipment | $ 7.10 | |
| Printing | 2,375.10 | |
| Salaries | 1,302.00 | |
| Commissions for securing $2,110.70 worth of advertising contracts | 502.40 | |
| Postage | 251.95 | |
| Current expense and advertising | 111.27 | |
| | | $4,549.82 |

### TOTAL EARNINGS.

| | | |
|---|---|---|
| Advertising charged | $3,794.06 | |
| Subscription | 39.15 | |
| | | $3,833.21 |
| Deficit | | $716.61 |

### CIRCULATION.

To members of the State Medical Society ..... 21,275

The deficit of $716.61 minus the cost of equipment $7.10 leaves an actual deficit of $709.51 which represents the cost to The State Medical Society of circulating 21,275 copies of The Journal, or about 3 1-3 cents a copy.

(Cost of each copy prior to the transfer of The Journal to The State Medical Society, 10 cents.)

### THE WISCONSIN MEDICAL JOURNAL.

Financial statement, June 1, 1910, to June 1, 1911.

| | | |
|---|---|---|
| Cash balance June 1, 1910 | $ 491.93 | |
| Received from The State Medical Society | 800.00 | |
| Collected from advertising | 3,593.90 | |
| Collected from subscription | 11.70 | |
| In payment of half tones, moneys advanced for collecting accounts, etc. | 14.00 | |
| | | $4,911.53 |

DISBURSEMENTS.

| | | |
|---|---|---|
| Equipment | $ 7.10 | |
| Printing | 2,576.20 | |
| Salaries | 1,312.00 | |
| Postage | 249.00 | |
| Current expense | 103.14 | |
| Commissions for securing $2,257.00 worth of advertising contracts from January 1, 1910, to November 1, 1910. | 600.90 | |
| Half tones, moneys advanced for collection of accounts, etc. | 27.33 | |
| | | $4,875.67 |
| Balance on hand June 1, 1911 | | $35.86 |

PRESENT CONDITION.

ASSETS.

| | | |
|---|---|---|
| Equipment | $ 144.83 | |
| Bills Receivable | 1,080.76 | |
| Cash on hand | 35.86 | |
| | | $1,261.45 |

LIABILITIES.

| | |
|---|---|
| Bills Payable | 855.50 |
| Surplus | $405.95 |

## PROCEEDINGS OF THE GENERAL SESSION.

Meeting called to order Wednesday, June 7, 1911, by the president, Byron M. Caples, who read his annual address.

ANNUAL ADDRESS OF THE PRESIDENT, BYRON M. CAPLES, WAUKESHA.
(Published in this issue of the Journal.)

RELATION OF PHYSICIAN TO PUBLIC CAMPAIGN AGAINST TUBERCULOSIS,
HOYT E. DEARHOLT, MILWAUKEE.

The Wisconsin Anti-Tuberculosis Association has made a close study of 1,200 case histories of living and dead consumptives for the purpose of determining the factors responsible for the spread of the disease. The data collected by non-medical and unprejudiced social workers offer a serious indictment of the medical profession. The reports give evidence of an amazing situation concerning the lack of proper diagnosis and treatment of the disease. More serious than this, however, is the lack of precise directions to patients and friends as to

simple precautions necessary to prevent family and neighborhood infection.

The study holds a mirror before the medical man in which he may see himself as he is frequently seen by patients, by the social worker, or as he is described. Whether or not the image is correct, it is unpleasant. A number of case reports are detailed. The profession is asked to study this evidence; if found correct to remedy the evil situation; if found incorrect, to protect itself from similar evidence falling into unfriendly hands.

### Discussion.

G. E. Seaman, Milwaukee: People are beginning to learn the fundamentals with respect to prevention and treatment of tuberculosis, and in many respects physicians are lagging behind the people. No case should be allowed to leave the physician's office without printed instructions as to future conduct. Physicians often fail to give proper statement of the situation to the patient.

T. L. Harrington, Milwaukee: We must remember that the statements of patients are often incorrect. Nevertheless I think the indictment that Dr. Dearholt has brought up against the profession in Wisconsin is true. The physician seems to fail to realize his responsibility. I usually give my patients Dr. Lawrence Flick's optimistic book on tuberculosis to read.

W. E. Durr, Milwaukee: The prevention of tuberculosis is an intensely personal one. It should come right home to all of us. Fumigation is too often carelessly and ineffectually done, if done at all. The statements in Dr. Dearholt's paper are true. The charge of gross carelessness on the part of many physicians is too true.

G. Windesheim, Kenosha: The physician is not sufficiently compensated for his labor of diagnosis, but it is his own fault. Make your examinations conscientiously and thoroughly and increase your charges accordingly. The patient will pay them willingly. The statements of patients I do not think are exaggerated. Not 25 per cent of the physicians in my territory give tuberculosis patients the thorough examination, attention and care that they deserve. Failure to tell the patient his true condition is wholly without excuse in the present day when tuberculosis frequently yields so readily to proper treatment. People are no longer afraid of the disease.

C. H. Stoddard, Milwaukee: Pressure is being brought to bear by the people themselves, which will in the course of a few years change the situation. The people are becoming educated rapidly on the subject of tuberculosis, and physicians will be forced to give their patients necessary information and instruction. The committee on tuberculosis should inaugurate a campaign of education amongst the physicians themselves.

George H. Fellman, Milwaukee: We must remember in making diagnoses that as a rule we do not find bacilli in the sputum in incipient cases of

tuberculosis. Diagnosis is often difficult, and I do not think we should tell our patients they have tuberculosis until we are certain of it. Dr. Dearholt has treated the physician with too great severity.

RICHARD C. CABOT, Boston: Dr. Dearholt's paper is an indictment of the medical profession of Massachusetts as well as Wisconsin, as the facts are the same there as here. The vast majority of physicians in Massachusetts cannot make an early diagnosis of tuberculosis. The indictment is a true bill against the whole profession. Practical examinations should be required for registration. Require the applicant to show his ability to diagnose incipient tuberculosis.

The presence of bacilli in the sputum is an evidence of advanced and not incipient tuberculosis. The latter must be diagnosed by physical signs and history.

Printed matter is of no great value in instructing patients, requiring as they do a radical change of the patient's habits. The instruction must be personal.

It often takes great moral and financial courage to tell a patient the truth, as the well-to-do leave town and the poor take to books of direction and cease their visits. Free dispensaries should be established under the charge of physicians who will devote their whole time to the early diagnosis and treatment of consumption. Such a municipal dispensary has been already established in Boston, and is doing excellent work.

### TREATMENT OF PUERPERAL INFECTIONS, FRANK W. VANKIRK, JANESVILLE.

Each case is a law unto itself as regards its treatment; all local treatment other than that called for by definite symptoms is useless and in the majority of cases harmful. Better results can be obtained by following out the conservative form of treatment, doing everything possible to build up the resistance of the patient, thereby helping the system to more quickly develop immunity to the infection present. As soon as immunity is developed, the temperature and the leucocyte count rapidly return to normal, and the exudate which is present in so many cases is quickly absorbed, thus allowing the patient to go on to a rapid, complete recovery.

### THE VENOUS PULSE AND THE HEART SOUNDS, J. A. E. EYSTER, MADISON.

This paper contains a review of the recent literature on venous pulse and heart sounds, with special reference to the h and x waves of the venous pulse and the third heart sound. The existence of a third heart sound is not inconsistent with an absolutely normal heart. The second sound is found to follow the first in a much shorter time than occurs between the beginning of the first and second heart sound. The length of cardiac cycles tends to remain constant.

ANNUAL ADDRESS IN MEDICINE. ESSENTIALS AND NON-ESSENTIALS IN PHYSICAL DIAGNOSIS, RICHARD C. CABOT, BOSTON.

I desire to call attention to the following important points:

1. In one instance the accidental finding of nodes on the scalp led to the postponement of a proposed operation for splenic anemia, and the change of diagnosis to syphilis.

2. A headache coming on at a certain hour in the morning and disappearing at a certain hour in the morning with perfect regularity, is absolutely indicative of frontal sinus disease.

3. Tophi in the margin of the ears are proof positive of the existence of gout.

4. A routine throat examination is essential in all physical diagnosis.

5. A peculiar satiny feel of the skin of the arm indicates alcoholism.

6. Feeling the pulse in both wrists at the same time may enable you to make out diagnosis of aneurism from inequality of pulses.

7. The stethoscope and blood pressure machines are the two most useful instruments of precision in making physical diagnoses. The measurement of blood pressure is the most important addition made to our diagnostic armamentarium in the last 15 years. But the only satisfactory instruments are the bulky ones. The blood pressure test is most important in cardiac and renal disease. Blood pressure measurements are more important in chronic kidney trouble than examination of the urine.

8. In pulmonary tuberculosis the proper study of inspirations gives us an earlier means of diagnosis than the study of expirations.

9. In using the stethoscope means should be taken to eliminate the sounds produced by the fingers slipping on the stethoscope and the stethoscope slipping on the skin.

10. To detect râles let the patient breathe in, breathe out, then cough.

11. The bacilli of tuberculosis when found in the sputum afford evidence of advanced pulmonary tuberculosis.

12. Grocco's sign is valueless.

13. Percussion is valueless in determining the size of the heart.

It is a difficult and useless procedure. Palpation, inspection and blood pressure will give the information.

14. Never diagnose heart disease on the evidence of the murmur alone. A large percentage of children have cardiac murmurs which are without significance.

15. In diagnosing diseases of the abdominal viscera, full and extensive history is essential. Physical signs are often entirely wanting.

16. Palpation of the abdomen is one of the most difficult and unsatisfactory methods of diagnosis. A warm bath makes palpation easier.

17. In gastric examination the essential question is, can the stomach empty itself. It is important to determine the size of the stomach.

18. There is no such disease as gastroptosis.

19. Bismuth plus X-Ray has not proven successful in the early diagnosis of cancer or ulcer in the viscera.

20. The guaiac test for occult blood is sure and easy.

21. A two-fold examination of urine should be made: (a) a collection of the 24 hour amount divided into day and night portions: (b) specific gravity. These two facts show the work of the kidney, and that is all you need. The only other tests necessary are for albumen and sugar. The search for casts is unimportant. The examination of the sediment is important.

22. The colored paper test for hemoglobin is valuable.

23. Pale people as a rule are not anemic and some people with red checks are anemic.

24. It is rarely necessary to make a count of the red blood corpuscles. But it frequently is necessary to count the white corpuscles.

25. Lumbar puncture may give you an early diagnosis of meningitis.

26. The newer methods of cardiac diagnosis have not as yet proved very valuable.

27. The X-ray is not a necessary part of routine diagnosis. The X-ray machine should be left to the expert. It is a valuable means of diagnosing syphilitic lesions through examination of the shin bones.

INTRAPERITONEAL RUPTURE OF URINARY BLADDER, WITH REPORT OF CASE, RESULTING FROM AUTOMOBILE INJURY, EVERETT L. MASON, EAU CLAIRE.

Owing to the protected position of the organ this rupture occurs but rarely. The tear may be vertical or transverse. The symptoms are first those of initial injury and second those resulting from a peritonitis or toxic state which may or may not occur. Differential diagnosis must be made between suppression, ruptured kidney, ruptured urethra and abdominal ascites. Jones divides the cases of peritonitis into four classes: (1) where bladder is infected at the time of the accident, (2) where the bladder is infected by catheterization, (3) where the peritoneum is infected at the time of operation, (4) where the peritoneum is infected by leakage of urine after the operation.

Immediate operation should be performed as soon as diagnosis is made.

Causes of death may be from shock due to the injury, (2) hemorrhage, (3) toxemia, (4) peritonitis. The last is the most common cause.

AXIS-TRACTION FORCEPS, JOSEPH P. MC MAHON, MILWAUKEE.

The history of obstetric forceps and the evolution of axis-traction forceps are given, and attention is called to the necessity of the more frequent employment of axis-traction forceps when high and middle applications are necessary.

ILEO-CECAL ADHESIONS (LANE'S KINK AND JACKSON'S MEMBRANOUS PERICOLITIS), F. GREGORY CONNELL, OSHKOSH.

Kinks in the lower ileum, and membranous pericolitis are common in cases presenting symptoms of chronic appendicitis. Removal of these conditions has been followed by permanent relief, in some cases in which appendectomy was not followed by improvement. They should always be looked for while operating for chronic appendicitis. In order to do so a large incision will be necessary.

They are probably not of inflammatory origin, but due to ptosis of the cecum. When present they should be removed or corrected, and an effort made to keep the cecum up and out of the pelvis.

It is not to be expected that this will relieve all such cases, but from a review of the literature and personal experience, it would seem rational to suppose that when liberal abdominal incisions, and correction of these conditions are more common, that our remote results after operation for chronic appendicitis may improve.

**Discussion.**

FRANKLIN H. MARTIN, Chicago: The Lane kink actually exists. Among other symptoms may be noted a serious anemia. Absolutely satisfactory results follow operation to straighten out the kink. During convalescence give patients fattening diet, and when supporting bandage is removed keep them in the Trendelenburg position.

## GRAVES' DISEASE (HYPERTHYROIDISM), LOUIS F. JERMAIN, MILWAUKEE.

1. Graves' Disease is due to thyroid intoxication. This view is supported by all scientific evidence at present obtainable.

2. The sympathetic nervous system plays an important role in the symptomatology of the affection.

3. Early diagnosis is of great importance if results from treatment,—whether medical or surgical are to be obtained.

4. Many of the milder types of hyperthyroidism are constantly mistaken for anemia, chlorosis, hysteria, neurasthenia and disorders of the menopause.

5. The best results are obtained by medical treatment in the milder cases and a careful co-operation between the surgeon and internist in the severe ones.

6. In all the milder types of Graves' disease the Forchheimer treatment gives very satisfactory results.

**Discussion.**

J. L. YATES, Milwaukee: The energy of the thyroid is increased by anything that increases metabolism, and when the activity of the thyroid becomes abnormal the symptoms of hyperthyroidism are established. It is only in the early history of this disease that a cure can be effected. When once thoroughly established hyperthyroidism is a surgical disease.

W. H. WASHBURN, Milwaukee: The literature on this subject is enormous, indicating that the whole question is in a very unsettled state. A great variety of different methods of medical treatment have been reported as being equally successful. The therapeutics is in an unsettled condition. My experience is that advanced cases do not respond to internal treatment. Patients who have symptoms of the disease well marked and who fail to respond markedly to internal treatment after a month or two, should be turned over to the surgeon.

K. O. THIENHAUS, Milwaukee: Too many patients are allowed to die under internal treatment when they could be cured by operation. The case which shows no improvement under medical treatment for two or three months or in which the symptoms reappear, should go to the surgeon.

## THE ACTION OF ARSENIC ON THE SKIN, ROBERT G. WASHBURN, MILWAUKEE.

Arsenic is a drug which is of very great value in a treatment of certain diseased conditions, but it must be borne in mind that it is a powerful poison capable of doing much harm when used indiscriminately. It should be used only where the indications are clear, especially where we are dealing with a chronic disease in which the medication must be continued over an extended period of time.

### Discussion.

L. SCHILLER, Milwaukee: Arsenic is one of the first drugs ever employed in medicine. Until recently arsenic has been given only in small doses, either as a tonic or as a nerve stimulant. Large doses were avoided because of their toxic effect.

Ehrlich's labors have opened up a new field for the old remedy arsenic. This remedy is comparatively non-toxic and does not destroy protoplasm, but does kill all forms of spirilla. In syphilis the 606 (salvarsan) directly ferrets out the spirochetae and destroys them instantly, and with one dose, with the exception perhaps of a few which may have been hidden away and require a second volley for their destruction. In fact the ideal method of the use of 606 is by two injections about 8 days apart. Ehrlich advises the injection of an oil emulsion of the drug into the gluteal region about a month from the time of the last injection, so that a reservoir may be formed which will gradually empty itself into the system and destroy any struggling spirochetae that may have survived.

In the use of arsenic generally (not speaking of 606), we must consider the idiosyncrasy of the patient in determining the doses. Otherwise we may do more harm than good.

C. A. BAER, Milwaukee: The experiments of Neisser and others seem to have shown that arsenic is of little value in dermatological work.

Untoward results in the use of 606 are beginning to appear in the literature.

606 may be administered subcutaneously or by intravenous or intramuscular injections. Results have shown that under no circumstances should the drug be administered subcutaneously, as obstinate dangerous abscesses may be formed. The intramuscular method is used if prolonged action is desired, while the intravenous method produces almost immediate results.

One case of complete arsenical paralysis is reported as having followed treatment with 606. In fine, the indiscriminate use of 606 should be advised against, for arsenical intoxication may follow repeated injections of the drug.

A. J. CAFFREY, Milwaukee: Having tried both methods I find that I get better results from the cacodylates than from 606. We have always been afraid of arsenic, but the cacodylates are the least toxic of all the arsenical preparations, due to the slow and grâdual liberation of the arsenic in the system.

CANCER OF THE SIGMOID FLEXURE AND UPPER RECTUM, KARL W. DOEGE, MARSHFIELD.

Digital rectal examination indispensable in all diseases afflicting the lower bowel. Examination in both prone and knee-chest position is advisable. Operation interference is necessary in all cases. First do a central laparotomy, and examine into local condition, and, if dilatation is present due to obstruction, do a colostomy through separate incision, and close abdomen. If the absence of metastatic growth make radical operation desirable, the continued method of operation is to be preferred. The absence of cachexia is of no diagnostic value.

MEDICAL INSPECTION OF SCHOOLS, RICHARD W. JONES, WAUSAU.

Mandatory inspection of public schools is a most important matter. The system of inspection has been in vogue in Wausau for a year, and the outlook is very promising. The compaign is practically one of education.

**Discussion.**

GEORGE P. BARTH, Milwaukee: Inspection of schools in Milwaukee was begun April, 1909. Since then 10 physicians have been appointed as medical inspectors, and one dental inspector has been appointed. The results are gratifying. Hygienic conditions both in the school and in the home are greatly improved. Special attention is sought to be given to mental and physical defectives; to the establishment of outdoor schools; to the proper seating of children; segregating the especially backward and exceptionally brilliant pupils, and giving proper school facilities for the exceptional students of all classes. Special study is given to truancy, its cause and cure.

C. R. BARDEEN, Madison: The need of medical inspection in the schools is shown in the examination of students for admission to the university. The medical inspector reports that only 25 per cent of the young men and 6 per cent of the young women are perfectly normal, due to ignorance of the importance of medical inspection, the public is rather niggardly, and should be educated to the importance of being willing to pay liberally for the protection of public health, and not require this protection, as at present, to be in a nature of practically a free gift from the medical profession to the public.

The University of Wisconsin will start next year a course for public health officers.

CHARLES S. SHELDON, Madison: This is one of the most important subjects before the community and medical profession. We should give a good start in life to those whom we bring into the world. The school should be a place where health is promoted, not a place, as is too often the case, where health is threatened and disease contracted. The economic waste resulting from our carelessness is enormous. There should be ultimately a state medical inspector to systematize the work and give proper instruction. Local inspectors in places of considerable size should devote their whole time to the work and should be well remunerated therefore.

FRED J. GAENSLEN, Milwaukee: An open air school should be established where children with incipient tuberculosis could be sent. One shameful thing should be stopped, and that is crowding children regardless of their stature into seats of the same size.

JOHN M. BEFFEL, Milwaukee: The time for the State to begin the medical inspection of the child is at the beginning of the child's life, and the state should not wait until the child enters school at the age of 5 or 6 years. The state controls the child so far as contagious diseases are concerned, yet but 8 per cent of the children under 5 years of age suffer from contagious diseases. If the state could follow the child through the first year of its life, it could control the 50 per cent death rate of preventable diarrheal diseases, and reduce it almost to zero. Men and women are trained for every occupation except fatherhood and motherhood.

INJURIES TO THE ORBIT, GILBERT SEAMAN, MILWAUKEE.

ARTERIOSCLEROSIS IN THE YOUNG, DANIEL HOPKINSON, MILWAUKEE.

Arteriosclerosis is not an infrequent finding in the young. Acute arteritis as the result of acute infectious diseases is often followed by permanent impairment of some part of the vascular tubes, as shown by later development of arterio-sclerosis. Congenital and acquired syphilitic history is often negative in arteriosclerosis developing in early life.

**Discussion.**

G. C. RUHLAND, Milwaukee: The importance of the element of hereditary predisposition is not sufficiently appreciated.

Acute infectious diseases are undoubtedly the most frequent predisposing causes of arteriosclerosis in the young. High blood pressure indicates nephritis rather than arteriosclerosis. Syphilis is the one great cause from the 25th to the 35th year.

L. M. WARFIELD, Wauwatosa: If we mean that any patch that is visible on an artery is arteriosclerosis then the disease is exceedingly common in the young, particularly after any acute infection. It is really a question of definition.

The question of arteriosclerosis is one of inheritance. What sort of tubing do we start out with? No disease predisposes to poor tubing as much as ancestral syphilis.

RELATIVE VALUE OF DIURETICS, A. S. LOEVENHART, MADISON.

Theobromin sodium salicylate, theophyllin sodium salicylate, sodium acetate and urea are all suitable for intravenous use in man, and this use presents many advantages. It is recognized, of course, that diuretics are really of use only in tiding over a crisis.

**Discussion.**

L. M. WARFIELD, Wauwatosa: We must remember that knowledge of the diuretic properties of drugs gained by experiments on healthy animals is by no means applicable to human beings with diseased kidneys. I have used 10 grains of urea intravenously with no ill effects. It is exceedingly soluble in water. My impression is that it has not proven to be a very valuable diurétic. Theosin sodium acetate has produced better results, and I have given it in doses as high as 5 grains. It is not very soluble in water, however. It is apparently an exceedingly valuable diuretic when given intravenously.

## ANNUAL ADDRESS IN SURGERY. THE PRESENT UNDERSTANDING OF RHEUMATOID CONDITIONS, JOEL E. GOLDTHWAIT, BOSTON.

The failure to achieve success in the treatment of chronic ailments is a reproach to the medical profession. But the time is coming when chronic as well as acute diseases can be cured.

Joint manifestations are symptoms merely of disease in various parts of the body. We must find the source of the disease, then the symptoms will take care of themselves. This principle applies to other chronic diseases. Rheumatism is a term we use when we do not want to bother to find out what the real trouble is. You must first of all make the same careful examination in chronics that you must make in acute cases.

We must then endeavor to learn the specific cause of the symptoms of these rheumatoid conditions. And first there is the large class of cases resulting from not using the body right, and which are really simple strains. Another class covers true gout, which can be diagnosed, to a certainty by the presence of tophi. In this manner we proceed until we have covered the real diseases grouped under the shadowy term.

Pursue no treatment that is not based on etiology and pathology.

As far as the atrophic form is concerned, the etiology is doubtful, but the condition is a degenerative rather than an inflammatory one.

In the infectious form of arthritis first get at the source of infection however distant, and plan your treatment accordingly.

Always remember that it is not the joint that is the disease. It is merely the expression of a disease in some other part of the body. Listen patiently to the history. It will often afford a clue. Forget the word diathesis. Direct conditions are not inherited.

Possible sources of infection are (1) the skin, (2) the genito-urinary tract or a local lesion therein. (3) nose and throat and accessory passages, (4) the alimentary canal, which is the most serious, frequent and difficult source of infection.

I had a case some time ago of a woman suffering from bronchitis and badly crippled with arthritis. She was operated on for antrum and frontal sinus conditions, whereupon her bronchitis and rheumatism promptly disappeared. The bronchial and joint conditions were caused by the focus of pus in the antrum overflowing, dripping down and poisoning her bronchi and joints. I recall a case of "rheumatism" cured by removing an ulcerated tooth.

Visceral ptosis is an existing fact due to incomplete evolution of the quadruped into the biped, and constitutes a serious handicap.

In fine do not pass over and neglect the chronic cases. Nature will do the work of cure there as gladly as she does it elsewhere if you will give half a chance.

### RABIES IN WISCONSIN AND ITS CONTROL, MAZYCK P. RAVENEL, MADISON.

Rabies is becoming more prevalent throughout the United States. Wisconsin has suffered severely during the last three years. The outbreak entered from the south, apparently beginning at Beloit and worked steadily northeast, with scattering cases in the western part of the state. A large number of farm animals have been lost. Laboratory examination of dogs who have bitten people shows about 50 per cent. of them rabic. Pasteur treatment was begun by the Wisconsin State Hygienic Laboratory and State Board of Health in November, 1909. Many cases were treated with uniform success. Lack of muzzling laws makes control difficult in our state and throughout the country.

### ON HUMAN EUGENICS, FRANK I. DRAKE, MADISON.

Man is a mammal, and equally with other mammals is subject to nature's laws. Popular ignorance of laws of heredity and laxity of moral and civil laws governing marriage have resulted in increase of insanity, epilepsy and imbecility. The Indiana method of sterilization has proven efficient. It is our duty to the state to educate the people along lines of sex hygiene and eugenics, and a University extension department should be organized for that purpose.

#### Discussion.

P. F. Rogers, Milwaukee: In my opinion this is the most important paper that has been presented to the convention. The root of the matter lies in the education of the people on the question of reproduction. The State University should be the agency through which information and knowledge of the subject of eugenics should be disseminated. Legal regulation of venereal disease is ineffective. Children should be taught at the earliest possible age

proper information in regard to sex reproduction. Millions are spent by the government for the improvement of stock, but not one cent for the improvement of the race.

VAGINAL PTOSIS, RALPH ELMERGREEN, MILWAUKEE.

If more reparative hygenic work is done, less major work will be called for, and the results of our work will be very gratifying. If you successfully overcome a rectocele and cystocele with general vaginal fullness, you often cure an old neurasthenic. Modern surgery must recognize the anatomic and physiologic causes of vaginal ptosis in aiming at a permanent cure. Present technique is excellent.

**Discussion.**

W. F. Malone, Milwaukee: The paper is of great importance and interest, especially to the obstetrician. Vaginal ptosis is due to injury of the vagina during parturition. The surgeon, therefore, should take great pains to detect and repair all lacerations, internal as well as external. If in repairing you search for and find the fibres of the levator ani and coaptate them as well as the fascia, the case will never get to the general surgeon.

A resolution was adopted requesting the establishment of a course in eugenics at the University of Wisconsin.

IMPALING INJURIES OF THE PELVIS, CHARLES J. HABHEGGER, WATERTOWN.

These injuries occur three times as often in males as in females. General statistics show a mortality of about 27 per cent. In the great majority of cases death is caused by peritonitis, although it may be due to shock or other causes. The appalling mortality is due to delay in operation, as these injuries occur most frequently in rural districts.

**Discussion.**

J. L. Yates: Mortality in many of these cases is due to shock rather than infection. Great care should be taken to reduce the shock to the minimum. Three curious forms of impalement might be mentioned. (1) accidental impalement in examination of pelvis per rectum. (2) perforation of uterus in abortion. (3) compressed air impalement.

W. G. Doern, Milwaukee: One is impressed with the high mortality in apparently minor impalements. Do not increase the shock of the patient by making a too perfect repair of the injured parts at one operation. It may be better to delay complete operation until the patient recovers from the shock. Nitrous oxide gas and oxygen plus morphine makes the best anesthetic in these emergency cases.

Charles J. Habhegger, Watertown (Closing): The injured person is very apt to regard his injury, even though it may prove fatal, as not being serious. I have known of many such instances.

## THE ASSOCIATION OF

# COUNTY SECRETARIES AND STATE OFFICERS

## OF THE STATE MEDICAL SOCIETY OF WISCONSIN.

W. F. ZIERATH, M. D., Sheboygan, President.

M. V. DEWIRE, M. D., Sharon, Vice-President.

ROCK SLEYSTER, M. D., Waupun, Secretary.

NEXT ANNUAL SESSION, WAUSAU, 1912.

**Under this heading will be published each month, papers, editorials, sermons, reports of meetings and all that relates to the County Medical Societies of the state. To it all are invited and asked to contribute, especially the County Secretary. It is yours—make good use of it, and may it be of help to every County Society. It will be edited by Rock Sleyster of Waupun, secretary of the new association, to whom all communications for this department, reports of meetings and news matter should be addressed.**

### DIGEST OF PROCEEDINGS OF THE SECOND ANNUAL MEETING OF THE ASSOCIATION OF COUNTY SECRETARIES AND STATE OFFICERS OF THE STATE MEDICAL SOCIETY OF WISCONSIN, HELD AT REST HAVEN, WAUKESHA, WISCONSIN, JUNE 6th, 1911.

Meeting called to order at 2 P. M., by the President, Dr. T. J. Redelings, Marinette. The registered attendance was 35. The minutes of the previous meeting were read by the Secretary, Dr. Rock Sleyster, Waupun, and approved and adopted as read.

The President presented his Annual Address. He said in part:

The slogan "get together" has resulted in beautiful progress. A study of the reports of the bodies operating under the American Medical Association is most gratifying. All serious minded men realize that medical education is not in a very satisfactory condition. There are altogether in this country 129 medical schools, half of which are doing reasonably acceptable work; the other half, owing to lack of financial support, equipment, and qualified instructors, might better be discontinued. There is no justification to-day for a medical school as a financial investment.

The County Sceretary will do well to court the friendship and favor of young men in the community about to begin the study of medicine, and give them correct information concerning the better

schools and hold up before them high ideals in medical attainment. The State University becomes the logical sponsor. The University of Wisconsin Medical Department was tardy in its development, but when it came it was organized along right lines. The faculty is able, the laboratories adequately equipped, and financial support is sufficient. I hope the day is not far distant when the University will send its medical men to the various counties of the state to demonstrate to medical societies new and better methods.

The professional spirit is growing. The county societies are growing in numerical strength and in the quality of the scientific work.

A paper on "What to Strive For" by Dr. Edward Evans of La Crosse, was read by the Secretary. Dr. Evans said in part:

The County Society is the unit and center of the state and national organization, but the County Secretary is the heart, the pulsing motor of the county society. In greater or less degree every one of his refractory flock is vaccinated with one or more of the seven deadly sins. How to inoculate with the opposite virtues is a task worthy of a Pasteur or an Ehrlich. We need organization *in* our profession to-day more even than organization *of* the profession. While medical men are notoriously hard units to unite, yet they need, as no other body needs, the benefit of co-operation. In our county societies we must preserve in their proper relations the social, the scientific and the business sides of the profession.

Because of special qualifications, medical men are bound to promote and assist all movements for the general welfare. The county societies should often hold open meetings. Most attention should be paid to the scientific side of medicene, to new theories rather than old practices.

A paper on "The Scientific Spirit in the County Society" was presented by Dr. E. B. Brown, of Beloit. He said in part:

To have the scientific spirit means that a man recognizes the value of and is in sympathy with all study and experimentation that tends to make diagnosis more exact and treatment more specific and with all measures that tend to eliminate preventable diseases. The county society should be a source and inspiration of scientific spirit for the profession of each county.

The first requisite is getting the men together; to do this any procedure is justifiable which will accomplish the result. Having built up a society strong as to attendance, the matter of promoting the scientific spirit is not so hard. There are certain measures of especial importance: First, the program. The program committee

should be appointed early. They will have time to find what men are interested in certain lines, what ones have special cases or original work to report. The program should be well balanced, with the scientific side not too prominent, yet the scientific atmosphere should prevail. Of especial value are the visits of some one from the larger medical centers who can bring the very latest in his line, and present it in an authoritative and scientific manner. There should be encouragement of the members in attendance on the various larger medical gatherings and clinics.

Dr. W. F. Zierath, Sheboygan, presented a paper on "The Business Side of Practice." He said in part:

The business side of medical practice should be methodically handled. Careful accounts should be kept, and bills promptly rendered. A close scrutiny of "charity" accounts should be kept. In many of these cases the necessity for charity on the part of the doctor will be found unnecessary. These same people, if they get into a lawsuit, will find the money to pay the lawyer. The same is true of other obligations. The doctor should be careful in his investments, confining them to properties in his own community, instead of, as is largely the case, going into various mining, oil and land schemes hundreds of miles away.

**Discussion.**

Dr. C. S. Sheldon said in part:

We are, it seems to me, notoriously and wonderfully careless and even negligent in regard to our business relations. If we have earned the money and make a reasonable charge, there should be no hesitation in sending the bills. The plan of having a business meeting once a year is worthy of serious consideration. In regard to outside investments it is with shame that I admit the doctor is an easy mark.

Dr. H. A. Jegi, of Galesville: I never allow a man to get away from me after he asks me how much a bill is. I carry a little memorandum book in my vest pocket, kept up to date, and am always ready to answer any such inquiry.

Dr. W. B. Hill, Milwaukee, said in part: When I had to do with the program of the Milwaukee County Medical Society, we arranged a meeting to discuss fees and bills, and everybody took part; it was an enthusiastic meeting and resulted in another meeting being held for the same purpose out of the regular order.

Another point brought out by the paper is the flat rate. He says, let there be no flat rate. I think it would be well for the man engaged in general practice to consider this matter in the same light that the surgeon has considered it from his point of view. The reason the surgeon is so much more

successful financially than the internist is because be makes the patient pay for it. The physician should receive what his services are worth, taking into consideration the man's circumstances and the responsibility taken in the case.

Dr. T. J. Redelings, Marinette said in part:

We should render a statement of our accounts at the close of the services, the same as the mechanic and the merchant. When service is rendered you in any line, the man is there with his bill and expects to receive his pay. We serve the people, and let our bills go anywhere from a month to 5 years. and some doctors are supposed to not send any bills at all.

Dr. W. F. Zeirath, (in closing) said in part:

Dr. Evans in his paper discouraged the idea of the doctor being a good business man, saying that the doctor who was a good business man was not a good scientific doctor. I cannot agree to that proposition. The doctor who must worry about his financial affairs cannot be a good scientific man. It behooves every one of us to be good financial men, and thereby better physicians.

Dr. A. Egdahl, Menomonie, spoke upon "Preventive Medicine," He said in part:

Preventive medicine is the medicine of the future. Members of the county society should be given opportunity to learn what is being done along these lines. There are several diseases that troubled us to a considerable extent years ago which are now of rare occurrence. Meetings should be held devoted to the consideration of preventive medicine, and papers along this line presented at every meeting, the expense to be borne by some organization interested in this work or by the Medical Society itself. Printed rules in relation to preventable disease should be furnished to patients. The various secretaries should call attention of the members to the valuable services rendered by the state hygienic laboratory at Madison regarding tests and microscopical examinations in tuberculosis, dyphtheria, typhoid fever, rabies and other preventable diseases. The public is beginning to demand that doctors should know something about preventive medicine. Most of the work in preventive medicine can be done in infectious and contagious diseases. The prevention of venereal diseases is an important part of preventive medicine. Also medical inspection in the schools in heading off a great number of preventable diseases in the start. We should try to create a great interest in the subject of preventive medicine in our medical societies.

**Discussion.**

Dr. Hoyt E. Dearholt, Milwaukee, said in part:

I am glad to hear Dr. Egdahl express the opinion that going into preventive medicine on the part of physicians will not necessarily decrease the

financial income of the physician. To me it seems that we are on the eve of a new era in medicine, one in which the physician will become more and more a practitioner of preventive medicine, and there must inevitably be a new system evolved by which those who practice preventive medicine will be paid. I am satisfied that the average income will be better under the new regime. As I have seen the situation in Wisconsin in regard to public health, and especially as seen from the view-point of tuberculosis, there are infinite possibilities for practitioners who will pay attention to this work.

Dr. C. S. Sheldon, Madison, said in part:

This is the field, it seems to me, in which the medical profession will do its greatest work hereafter. The county society might be a most important and effective agent if it would take up this work and conduct it with zeal. In every town of every size where we have a medical society there should be a supervision on the part of the county secretary in regard to preventive medicine, along the lines of contagious diseases, hygiene and sanitation, and the uses and abuses of patent medicines and other things which the public ought to know about from the medical standpoint.

Dr. H. W. Abraham, Appleton, said in part:

Dr. Sheldon mentioned the fact of bringing this subject more forcibly to the public through the means of the press. In one of the smaller towns of 17,000 or 18,000 people with two daily papers, when they are short of news the reporters go around and interview the physicians of the city on just such subjects as have been mentioned here, usually upon a disease prevalent at that time, such as for instance, typhoid fever, dyphtheria, colds, etc., and occasionally there has been an article on the prevention of tuberculosis, method of ventilation, the value of fresh air, and matters of that kind. These articles have been put in the reading columns of the paper. They are not written by the physician but by the reporter himself. They have had considerable influence upon the public opinion of that town.

Dr. R. H. Buckland, Green Lake, spoke in part as follows:

One in which the Anti-Tuberculosis Society is trying to make practical something in preventive medicine at Green Lake, is by endeavoring to establish a sanitary drinking fountain at the school, the present system of individual drinking cups being very imperfect and not sanitary. Another way is to have the articles given out by the Wisconsin Anti-Tuberculosis Association printed in the local papers.

Dr. A. Egdahl, Menomonie (closing), said in part:

I heartily endorse what was said by Dr. Abraham in relation to the importance in tuberculosis, of early treatment. We could do a great deal by calling attention to the fact that every case should be diagnosed in the early stages.

The problem of rural health is just as important as the problem of urban health. Ventilation of buildings, the location of wells, the presence of flies about the premises are just as important in the country districts as in the cities. This is a side of preventive medicine that has been almost left untouched.

Dr. H. A. Jegi, of Galesville, presented a paper on "Membership and Attendance." He said in part:

Who should the members consist of? Should every person holding a diploma or license to practice the profession be persuaded to join the county society? One of the most distressing features of the profession is the undercurrent of disloyalty among its members, the desire to secure some advantage over others by methods that come under the term "questionable." Get the irregular man into the society, give him work to do, elect him to office, and you may be surprised at the good work he will do. If he persists in the old ways, turn him over to the care of some other member. There are very few but what can be reached. Though you may not be able to make a good ethical member of him, I believe he will harm the society and profession less as a member, and you may do him lots of good. The ideal man and physician will join of his own accord. The indifferent man is the most difficult of all to handle.

We have done away with the bugbear of writing papers, and have replaced them with case histories.

Dr. M. V. Dewire, of Sharon, presented a paper on "How Can We Get the Attendance of Country Members." He said in part:

Select the place of meeting with the idea of the convenience of reaching it to the greatest number. Arrange the time and number of the meetings to suit the majority of the members. Evening meetings might be practicable in the season of good roads. Invite the doctors to bring their wives, and let the ladies visit while the men are discussing business and work. The printing and arrangement of the program can be made to wield an influence in securing attendance. In arranging the program it is best to take up live subjects for the principal part. Subjects of particular interest to members of certain localities will often bring out several members who are not in the habit of attending regularly. Encourage the members to report their difficult and unusual cases. The scientific side should not be neglected. It is well from time to time to invite someone from the outside who is making investigations along special lines to address the meeting. The social features can be depended upon to bring out a good attendance at at least one meeting of the year. Subjects of semi-public interest, such as anterior poliomyelitis, tuberculosis, the public drinking cup evil, or the spread of disease by the common house fly, or an illustrated lecture, will help to attract. The largest factor in the successful meeting is the personal element between the secretary and the individual member.

**Discussion.**

Dr. Daniel Hopkinson, Milwaukee, said in part:

Dr. Dewire sent me one of his programs about a year ago. It was very tasty, and I believe this "gray matter" of which the Doctor speaks, and of which he is so well possessed, that attracts the man to the meeting, and when he gets there the material is there which will keep him.

Dr. G. Windesheim, of Kenosha, said in part:

Dr. Dewire's success with his meetings is the more remarkable when you consider that Walworth County has 30 members, and that those 30 members are scattered all over the county, with only 3, 4 or 5 members in any one town.

Dr. C. S. Sheldon, of Madison, gave an informal talk. He said in part:

I believe that this matter of organization begun 7 or 8 years ago is really the greatest movement and will be productive of the greatest result of anything undertaken in the medical profession for a long time. We needed to get together. We need the spirit and the ideals which this movement has promoted. If we properly use the power which organization gives us, the medical profession can do much in the promotion of high standards of medical education, the securing of better laws as to admission to practice, and in preventive medicine.

Dr. Rock Sleyster, Waupun, gave a talk. He said in part:

I think every county society should have a committee whose business it is to look over the field and see that every eligible man becomes a member. The committee should keep after him until he becomes a member. This would result in a more complete membership. The success of any society reverts back to the character of the program. I want to bring up for discussion the preparation of a list of the prominent men in the state who will address our county meetings, to be furnished to the secretaries of the various county societies. It has been my experience that meetings so addressed always brought out the attendance.

Dr. A. Egdahl, Menomonie, said in part:

I understand the University Extension Department is very glad to co-operate with the Medical Society and would no doubt furnish good men.

Dr. C. S. Sheldon, Madison: I know the State University is desirous of keeping in close touch with the medical profession of the state, and they are very willing to furnish any of their medical facul-

ties, or the faculty of the natural sciences, to give talks on their special lines of work.

President T. J. Redelings, of Marinette: It is my hope that the University will send men to make an organized effort in the medical profession the same as it has been doing in its agricultural work, in which they have been doing excellent work. It seems to me worth very much more to conserve human life than it is to conserve the life of animals.

A motion was duly made, seconded and carried that a committee of 3 be appointed to list the names of the men and the subjects, and have them printed on a postal card and sent to the county secretaries, and also published in the Journal. The following committee was appointed:

Dr. C. S. Sheldon, Chairman; Dr. Daniel Hopkinson, of Milwaukee, and Dr. Rock Sleyster, of Waupun.

Dr. E. B. Brown, of Beloit: I suggest the possibility of some exchange system between the county societies in connection with the work of this committee, so that if a particularly good paper is read before one society, other societies may have an opportunity of hearing it.

Dr. W. F. Sarles, of Sparta, addressed the meeting. He said in part:

This gathering takes me back to the St. Paul meeting in 1900. It was held in a large theater, and the Pennsylvania delegation was fighting one another, to say nothing of fighting New York and Ohio, and we spent three days in debate, and it came more forcibly to the profession than ever, that we had to reorganize. At that time we had here in Wisconsin about 600 members, and one representative in the House of Delegates. I think the present membership is around 2000, and we have 3 representatives in the House of Delegates.

The national body is a magnificent body. We have a journal representation of something like 54,000 out of about 100,000 practitioners of medicine in the United States, and this within a period of ten years; it is simply wonderful. We have increased our facilities at the journal office at least threefold. We have a property of between $600,000 and $700,000 at a low estimate. This great organization, which experts agree is probably the best form of society organization known to the world, with its three quarters of a million of property, and its increase in the journal circulation, has all come about from the fight at the St. Paul meeting in 1900.

The following officers were elected for the ensuing year:

Dr. W. F. Zierath, Sheboygan, President; Dr. M. V. Dewire, Sharon, Vice-President; Dr. Rock Sleyster, Waupun, Secretary.

Dr. A. R. Craig, assistant to the Secretary of the American Medical Association, addressed the meeting. He said in part:

The whole subject of the work of the organization has been to me a wonderfully interesting thing. In studying this subject, I have been interested to find how few men really had a suspicion of what the possibilities of a real organization were. If you read the history of the American Medical Association, you will find that in the old days a delightful lot of gentlemen would meet together and promulgate and expound and resolve and adjourn; and in another year they would come together once more in a new field, and again orate and expound and resolve and adjourn. So the American Medical Association went on for some 40 to 50 years of its growth. True, it was gathering new forms and new impetus, and was doing something, but you could practically see nothing of the work that was accomplished, except a pleasant time was had at each annual session. Then came that wonderful epoch in the Association's life, when things began to happen after a year or two, and the American Medical Association met once a year, but lived throughout the year. To-day, if you were to go to Chicago, you would find on the corner of Dearborn and Indiana Ave., a 7 story structure with some 150 employees, your employees, working every day in the year to accomplish your ends under your delegated direction, to accomplish the purposes and ends of that organization. I would like to say that this organization will be completed and will be really effective when each state in its turn is organized in such a way that you do not meet for a week's session or a 3 or 4 days' session, but you meet as a board of bank directors might meet, to determine the policy of the machine which is to be effective throughout the year.

The secretaries of your county medical societies must be leaders in the various medical societies. Before you can be a successful leader, you have to come to the county secretaries' meetings. You have to meet the other fellow and get something of his spirit and take it back home with you.

Dr. Daniel Hopkinson, Milwaukee, spoke on "The County Society and the Public Press." He said in part as follows:

As I see it, there are two things that we have to look to, first, the disadvantages of the public press, and secondly, the advantages. The

disadvantages might be covered in the free advertising to the medical man who is looking for it.

A motion was present in the Milwaukee County Society appointing a Press Committee, and this Press Committee should co-operate with the public press, and at any and all times supply information on medical subjects so that they might publish the articles and have attached thereto the Press Committee of the County Society. If a specialist in any line of work is interviewed along the lines of any discovery in his specialty, instead of receiving the reporter he can refer him to the Press Committee, with the understanding that the Press Committee will be so posted that the knowledge that the reporter receives from this Press Committee will be as accurate as it is possible, and will give to the public a true presentation of the subject. I believe this will in a good many cases prevent interviews, and will give the opportunity to the man himself of refusing to give any light on the subject except through the Press Committee. That the public press is a great advantage to the profession is no doubt. The paper read this afternoon on "Preventive Medicine" well illustrates the possibilities of bringing to the public ways of prevention in an intelligent manner, and the Press Committee of any County Society can periodically give to the press such items as are of interest at the time, or of new discoveries that may be made. Matters of medical legislation and motions that are brought before the Society can all be presented to the public press through the Press Committee.

Dr. R. H. Buckland, Green Lake spoke on "One Way to Get and Hold Members." He said in part:

Two years ago our County Society had 20 members, and this last year the last member we accepted, made us 30 members. The territory in these 3 counties makes it quite a broadly scattered field with poor railroad connections. The President and Secretary both live at Green Lake, and are both on the program committee, the third member being in a town nearby, making it convenient for us to confer frequently in regard to plans for the meeting, what we will have on the program, and where it will be held. In an effort to secure members, I had a little spare time last May a year ago, and started out and traveled through the different towns and called at the office of the different doctors, some of whom were members, and some not, and took the matter up with them and told them the advantages of being members of the County Society, and the result of that one trip was the securing of 7 new members. That personal canvass through your territory once a year or once in two years will do much

to hold the membership. The thing I emphasized in speaking to the men who lived in the outskirts of our territory was the medical defense feature. We have two meetings every two months and the programs are short. We have one or two papers at the outside. We try to have one man give a complete paper on some subject, and a full discussion, giving them plenty of time for discussion, after which we have an informal visit and talk amnog the men, and once a year we hold a picnic at Green Lake, and all the doctors in the territory and their wives and families are invited.

## ASHLAND-BAYFIELD-IRON COUNTY MEDICAL SOCIETY.

The Ashland-Bayfield-Iron County Medical Society met at the Elks Club House in Ashland on Friday evening, May 26, at 7 o'clock. Supper was served at that hour after which this program followed:

*Obstetric Emergencies*, by Dr. J. V. Wenzel. Discussion opened by Drs. Andrus of Ashland and Mertens of Bayfield.

*Present Status of the "606" Treatment*, Dr. M. S. Hosmer. Discussion opened by Drs. Hertzman of Ashland and Stebbins of Hurley.

*Emergencies in Eye, Ear, Nose and Throat Practice*, Dr. A. O. Shaw. Discussion opened by Drs. O. Braun of Ashland and Law of Glidden.

J. M. Dodd, M. D., *Secretary.*

## CHIPPEWA COUNTY MEDICAL SOCIETY.

The Chippewa County Medical Society held its annual meeting May 17, 1911. The meeting was called to order by Pres. A. W. Wilmarth at 8 P. M. Dr. Stephen E. Williams, of Chippewa Falls, read a paper on *Goiter*, which was freely discussed by the members present.

Next, Dr. C. A. Hayes gave us an interesting paper on *The Value of Goats Milk in Infant Feeding.* Dr. C. W. Wilkowski then read a paper on *The Diseases of the Accessory Sinuses.*

Election of officers for the following year was the next business to receive attention. Dr. A. W. Wilmarth was re-elected President, Dr. C. A. Hayes was re-elected Vice-president, Dr. A. L. Beier was elected Secretary-treasurer. Dr. R. B. Cunningham, of Cadotte, was elected Delegate; Dr. R. G. Rodecker, of Holcombe, was elected alternate.

On motion it was decided to hold our next meeting some time in June; the physicians of Chippewa Falls having determined to give a picnic for the physicians of the county and their families some afternoon, to be followed in the evening with a program.

The meeting was more successful than any held within the last few years. Within a very short time we expect to have in our Society every eligible physician in the county.

A. L. Beier, M. D., *Secretary.*

## CRAWFORD COUNTY MEDICAL SOCIETY.

A meeting of the Grant County Medical Society was held at Lancaster on May 17th. There were about 15 physicians in attendance. Papers were read by Drs. Wilson Cunningham, Platteville and John A. Gault, Lancaster.

## GRANT COUNTY MEDICAL SOCIETY.

The Crawford County Medical Society held its May meeting at Soldiers Grove on May 25th. Physicians present were: Drs. G. H. Perrin, Wauzeka; F. B. Taylor, Mt. Sterling; A. E. Dillman, Steuben; Martin Hagen and A. J. McDowell of Soldiers Grove and C. B. Lumsford of Gays Mills. An excellent program was given by Drs. Perrin, Hagan and Taylor. The meeting was held at the village hall after which the members were tendered a banquet at the Briggs House.

## SHEBOYGAN COUNTY MEDICAL SOCIETY.

The May meeting of the Sheboygan County Medical Society was held on May 22nd. Dr. Hollis E. Potter of Chicago delivered a lecture on X-ray work. After the lecture the members of the society adjourned to the Elks Clubhouse where a dinner was served.

---

## BOOK REVIEWS.

**Prevention and Treatment of Abortion** from the C. V. Mosby Company Press by Frederick J. Taussig, A. B., M. D., St. Louis.

This treatise discusses comprehensively and very scientifically the subject of abortion. The diction is explicit and the work is rich in photographs and drawings. The press work in this book, which is the first one the writer has reviewed from C. V. Mosby Company, compares favorably with that of the best known publishers.

The subject matter is discussed under four headings, namely definition, general considerations, prevention of abortion and treatment.

The definition differs from the generally accepted understanding of the term in that the author extends the time limit of interruptions of pregnancy so as to include all pre-viable expulsions of the product of conception under the term abortion. In the same paragraph the viability of the fetus is estimated to date from the sixth month of pregnancy and the term abortion and miscarriage are used synonymously.

The proportion of abortions in married and unmarried women is stated as being nearly the same.

Under the head of etiology toxic irritations are divided into three classes, one of which is Placental toxins. Hyperemesis, Chorea, and Eclampsia are instanced as expressions of placental toxins. The reviewer was not aware that the cause of these conditions had been definitely located in the Placenta.

The difficulties of establishing a diagnosis in early abortion or of even determining the presence of an ovum are emphasized and the decision is left

to a demonstration of chorionic villi and syncitial cells. In cases of embryonal or fetal death followed by delayed expulsion and where decomposition and liquefaction render the embryo or fetus an indistinguishable mass of peptonized tissue too necrotic for cellular staining, the author suggests that the diagnosis can occasionally be made by demonstrating the retinal pigment which, he says, remains intact for months after death. This is truly an ingenious and advanced procedure.

In inquiring for a cause in a given case we are admonished to examine the fetus and placenta for the Spirochaete Pallida and for evidences of gummata. The Wasserman reaction is recommended as being useful in determining the cause, in indicating proper treatment and in deciding when treatment may be discontinued.

The mortality of mothers is said to be higher than the mortality attendant upon delivery at term. The morbidity is estimated as being higher also because of improper treatment during and following premature interruptions of pregnancies, particularly because of failure of patients to remain in bed for a sufficient length of time.

Under prophylaxis the necessity for a thorough course of antisyphilitic treatment before conception is emphasized.

When lues appears as a complication of pregnancy maximum doses of Hg. and KI. are advised. When smallpox complicates pregnancy re-vaccination is advised as serving to minimize the severity of the attack.

Postural and Hg. in rubber bags are the treatments advocated in retropositions. Opium and bromides are selected as being the drugs of choice in preventing threatened abortions.

The prevention of criminal abortion is assigned to the agencies of education and legislation.

Under the caption of treatment Ergot is condemned because of its effect in causing cervical retraction thereby preventing expulsion of the ovum. Digital and bi-manual expressions of detached ova are well illustrated. Ecouvillonnage, or the French method of loosening fragments of placental tissue by means of a stiff bristle test tube brush, is strongly advised when evidence of retained placenta is manifest. Meddlesome interference is discouraged, and operative treatment by the general practitioner in average surroundings is advised only when complications ensue. The general neglect of after treatment is impressed.

The frequency of incomplete involution with the attendant sequelae is emphasized, rest in bed in the lateral position for two weeks and confinement to the chamber during the third week are prescribed to prevent complications and sequelae.

The book is addressed primarily to the general practitioner, to whose lot is falls to treat the vast majority of abortions and the author has met every indication with unusual lucidity.—J. P. M.

---

**Manual of Cystoscopy.** By J. B. Squier, M. D., Prof. of Genito-Urinary Surgery, N. Y. Post-Graduate Medical School, and H. G. Bugbee, M. D., Instructor in Genito-Urinary Surgery, N. Y. Post-Graduate Medical School.

Leather, price $3.00, pp. 117 with 26 plates. New York. Paul B. Hoeber.

The number of manuals appearing each year on Cystoscopy offers favorable testimony regarding both the importance and the increasing use of this diagnostic aid. The small book of the author's should help to convince the general practitioner of the simplicity, safety and service of cystoscopy—a subject which can not be learned from books alone, actual experience being necessary, but well made plates combined with a proper text can materially assist the beginner—and it is for such that these manuals are written.

E. A. F.

---

**A Treatise on Diseases of the Nose, Throat and Ear.** By WILLIAM LINCOLN BALLINGER, M. D., Professor of Laryngology, Rhinology and Otology in the College of Physicians and Surgeons, Chicago. New (3d) edition, thoroughly revised. Octavo, 983 pages, with 506 engravings, mostly original, and 22 plates. Cloth, $5.50, net. Lea & Febiger, Philadelphia and New York, 1911.

This volume, now in its third edition, is one of the most complete and practical treatises published on the nose, throat and ear. Not only is the work enriched with the experience and technique of the author, but various other methods and treatments of other writers are compared and described.

His descriptions of operations are especially clear and concise and the drawings accompanying the text are new and unusually good. Operations on the sinuses are given the importance and space modern methods demand; these chapters alone making the volume a necessary addition to a physician's library.

C. S. B.

---

**Principles of Therapeutics.** By A. MANQUAT, National Correspondent to the Academie de Medicine. Translated by M. Simbad Gabriel, M. D. D. Appleton & Company, New York & London, 1910. 298 Pages.

We have presented here an English translation of Dr. Manquat's work on the principles of therapeutics. The volume is not large, containing about 300 pages. The translation and the print are satisfactory. As stated by the author the object of the book is not to indicate the proper treatment of the different diseases but rather to lay down therapeutic principles. The book is especially directed to the young physician whom he believes is in a position, more than others, to profit by it. The volume though small, undoubtedly represents a great amount of labor, and contains valuable material. It is not speculative but attempts in every line to be practical.

The following are some suggestive headings of Chapters: "The Forms of Therapeutic Action," "Medicinal Opportunity," "The Elements of Therapeutic Individualization," "Method in Therapeutics," "Influence of Environment on Therapeutic Results." As a work on therapeutics, the volume will be found disappointing by many, largely because its scope is so much restricted. However, for one starting his therapeutic experience, a careful reading should do much to place his use of therapeutic measures on a rational and intelligent basis.

---

# THE WISCONSIN MEDICAL JOURNAL

JULY, 1911.

## ORIGINAL ARTICLES.

### THE RELATION OF THE PHYSICIAN TO THE PUBLIC CAMPAIGN AGAINST TUBERCULOSIS.*

BY HOYT E. DEARHOLT, M. D.,

MILWAUKEE.

The Wisconsin Anti-Tuberculosis Association has been engaged during the past year in a series of community and rural investigations of the conditions which are responsible for the existence and continuance of the tuberculosis problem. Nine cities of varying size and geographical distribution, and one county, almost entirely rural, were chosen for the studies. A well trained sociological student and experienced field worker was put in direct charge of the work and as many as fourteen different assistants have taken part in the collection of the data on the 1411 schedules upon which our reports are based.

The schedule adopted was a comprehensive one, covering over fifty specific queries and observations. The general subjects into which the investigation was made were

1st. Dwelling Conditions.
2nd. Economic Conditions and,
3rd. Medical History.

The latter, to which this report is confined, covered

(a) Duration of the disease,
(b) Tuberculosis family history,
(c) Suspect cases in the family,
(d) Occupation at onset of the disease, effect on disease,
(e) Present occupation,
(f) Number of physicians consulted and history of the consultations,

*Read at the 65th Annual Meeting of the State Medical Society of Wisconsin, Waukesha, June 7, 1911.

(g) Disposal of sputum,
(h) Care of eating utensils,
(i) Facilities for open air treatment.

The public medical aspect was considered

1st In the history of the house relative to tuberculosis,
2nd Length of residence,
3rd Migration of families,
4th Disinfection after death or removal.

We are indebted to the state and local health departments for statistics of deaths and registrations studied.

While it was attempted to make the investigations scientific, their object was primarily to be utilitarian rather than to make original contributions to science. In such reports as we have made to the public, reference to the material which constitutes this paper has been vigorously blue penciled. The writer has held that the problems here presented are first of all medical problems, and, while of the most vital importance to the public which constitutes the clientele of the medical practitioners, greater possibilities and opportunities are promised in the solution by the organized profession than are through any attempt at this time of the non-medical public.

Diagnosis.: Just as correct diagnosis is the very first essential in the control of an individual case of tuberculosis, so knowledge of how early patients are made aware of their condition, of their personal danger and the menace they may be to their families and neighbors becomes the first consideration in the attempt to control society's infection. In our investigation, it was impossible to go into the individual diagnosis and determine with any exactness whether or not it was correct or made as early as it should be. Obviously such data can only be obtained by or from practitioners and, therefore, is outside the limits of our investigation. Each practitioner has knowledge of individual lapses in diagnosis and treatment and probably has his own opinion that these lapses are not infrequent; nevertheless, few have an opportunity of seeing so large a number of cases from the patient's rather than the physician's viewpoint. It is difficult to obtain correct information, in a large percentage of our cases, from the patient or his family as to whether or not the physician made the diagnosis, owing to the fact that there is still a surprisingly large number of physicians who do not tell their patients of the positive diagnosis of tuberculosis.

*Chart No. 1.*

DIAGNOSIS.

| | | Registering Physician. | | | Physicians Not Registering. | | |
|---|---|---|---|---|---|---|---|
| | | Said Nothing or Refused To Say | Gave other Diseases | Said T. B. | Said Nothing or Refused To Say | Gave other Diseases | Said T. B. |
| 354 | 1st Physician | 22 | 38 | 135 | 34 | 57 | 68 |
| 204 | 2nd " | 7 | 5 | 66 | 15 | 34 | 77 |
| 95 | 3rd " | 1 | 3 | 24 | 7 | 23 | 37 |
| 42 | 4th " | 3 | .. | 9 | 4 | 5 | 21 |
| 24 | 5th " | .. | .. | 10 | .. | 5 | 9 |
| 8 | 6th " | .. | .. | 3 | 1 | 2 | 2 |
| 6 | 7th " | .. | .. | .. | 5 | .. | 1 |
| 5 | 8th " | .. | .. | .. | 1 | .. | 4 |
| 3 | 9th " | .. | .. | .. | 1 | .. | 2 |
| 741 | TOTAL | 33 | 46 | 247 | 68 | 126 | 221 |

Chart 1 is based upon 741 cases in the only city in the state in which registration is general enough to offer any suggestion as to whether the patient's failure to learn the cause of his symptoms is due to ability or inability of the physician to tell him.

In the first division of this chart the physician was certain enough of his diagnosis to register the case with the health department, still, of 195 cases, 60 (nearly one-third) were left in ignorance of the nature of their disease or were deliberately lied to by the first physician consulted: of 326 cases, 70 (nearly one-quarter) were left in ignorance or were lied to by from one to nine different physicians.

As the number of consultations increased, it is likely that the nature of the disease became more and more obvious to the patient and his friends, presenting less opportunity or need, if you please, for concealment.

There is no means by which we may judge in the second division (the unregistered cases) whether or not the physician knew the correct diagnosis. Of 159 cases, 91 (considerably over one-half) failed to receive the service for which they consulted the first physician: of 415 cases, 194 (nearly one-half) failed to receive the service for which they consulted from one to nine physicians.

There will follow case histories to show the possible result of what I choose to believe is in most instances mistaken kindness and seldom cowardly dodging of discomforting responsibility.

Before concluding this chapter, I want to express a different opinion than is common in papers on diagnosis. It is no disgrace for a practitioner who is not making chest examinations every day,

to be unable to make an early diagnosis of pulmonary tuberculosis. It is a nice proceeding, frequently needing, in my opinion, more skill than does the opening of an abdomen. Surgical technique and deftness of fingers can be acquired on dogs and cats and on the cadaver. Ears become practiced in delicate diagnostic signs only through many and frequent human chest examinations. Lest I be misunderstood, let me say that I give this testimony not as one who has the skill, but as one who lacks it.

When expert diagnosticians are called as readily, in these borderland cases, as surgeons are for operations, then, and not till then, will any great proportion of patients be started on their treatment in an early stage of the disease.

TREATMENT: The Wisconsin Anti-Tuberculosis Association has concerned itself very little with the treatment of individual cases of tuberculosis, recognizing the fact that this is more particularly a matter of concern to the patient and his friends than to society in general. The medical organizations of the state may well take up a study of the phase of the problem which is indicated by chart 2, not alone because of its public importance, but because of its bearing upon purely selfish class interests. The fact that one patient may visit nine separate physicians in the course of his disease is of little interest except to indicate that the patient has a poorly developed power of discrimination. When, however, nearly one-half discharge or fail to return to their physicians, the subject becomes one of economic interest to the physician himself. Patients going from one physician to another do so usually without giving or gaining much benefit. If the physician has made a conscientious study in the first sitting or two, he has not usually been paid for his time. If, on the other hand, the patient pays full value for one study after another, he ought to be unnecessarily duplicating his expense and have some means of knowing it. If the regulation of quacks, vending of patent nostrums, licensing of practitioners, etc., are responsibilities of the organized profession, how much more so is the correction of the condition set forth here.

Granting that the situation is primarily due to the ignorance of patients, who, except the organized medical profession, can, without offense, set a standard of medical service and train the public to a comprehension of that standard?

PREVENTION: Of infinitely greater importance than the relief of symptoms, or even the cure of a patient, is the instruction or lack of it concerning the exercise of measures necessary to prevent communication of the disease. There may still be an honest difference

of opinion concerning details of treatment, but there cannot be any excuse offered for a physician who fails to inform his patients what they must or must not do to prevent infecting remaining members of their families. Nor does his obligation cease until he has thoroughly instructed at least one uninfected member of the family in the danger and safeguards necessary for their preservation. This is so evident that it undoubtedly seems absurd to even mention, much less dwell upon, the subject in a meeting of medical men. Chart 3, offers my justification. Information upon the most primitive factors, care of sputum, use of individual dishes, together with separate washing, and sleeping alone, were the tests used. Advice in all of these is not proof of adequate instruction. The lack of a single one, however, would seem to warrant an assumption that more delicate tests would bring out more startling figures.

*Chart No. 2.*

NUMBER OF PHYSICIANS CONSULTED.

| Number of Physicians Consulted. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| Oshkosh | 78 | 65 | 23 | .. | .. | .. | .. | .. | .. | 166 |
| La Crosse | 49 | 37 | 19 | .. | .. | .. | .. | .. | .. | 105 |
| Dunn Co. | 143 | 65 | 17 | 6 | .. | .. | .. | .. | .. | 231 |
| Milwaukee | 354 | 204 | 95 | 42 | 24 | 8 | 6 | 5 | 3 | 741 |
| Wausau | 33 | 17 | 7 | .. | .. | .. | .. | .. | .. | 57 |
| TOTAL— | 657 | 388 | 161 | 48 | 24 | 8 | 6 | 5 | 3 | 1,300 |

Of our 1411 cases, over one-third were given the diagnosis and no precautionary directions. Forty per cent were cautioned concerning the infectiousness of the sputum. While 27.5 per cent were advised to use separate dishes only 20 per cent understood that they should be washed separately. Thirty-two per cent understood that a consumptive should not sleep with another member of the family.

REGISTRATION: As an enterprise of the health department, registration of consumptives has been looked upon by many physicians as being of merely statistical interest. Did its claim rest solely upon a remote scientific value to public medicine and sociology, I might, while deprecating such an attitude on the part of a member of a scientific profession, still sympathize with the human impulse to shield an individual patient from ever so slight an immediate sacrifice for a remote public benefit. While there has not been the general efficiency in the local health departments which the importance of public health would seem to demand, still the department must be informed of the specific existence of disease before it can be expected to put up the bars of prevention.

The health department, in return for the obligation which has been put upon the physician to report patients, must not alone give full return in preventive measures, but go still further in assisting, when called upon, in the care or relief of dangerous patients.

*Chart No. 3.*

INSTRUCTION.

| | Total Cases in Which Reports Obtained | Said Tuberculosis Advised No Precautions | Advised Care of Sputum | Advised Individual Dishes | Advised Washing Separately | Advised Sleeping Alone |
|---|---|---|---|---|---|---|
| 1st Group | 865 | 348 | 397 | 285 | 177 | 339 |
| 2nd " | 220 | 32 | 127 | 82 | 82 | 93 |
| 3rd " | 67 | 5 | 38 | 22 | 22 | 24 |
| 4th " | 144 | 52 | .. | .. | .. | .. |
| 5th " | 115 | 33 | .. | .. | .. | .. |
| TOTAL— | 1411 | 470 | 562 | 389 | 281 | 456 |

I am well aware of the fact that health officers are usually miserably paid. On the other hand, I know of few who are earning more than their wage. The most certain method I know of increasing the stipend of the health officer is by heaping upon him more legitimate work than he can do. This will make one interested lobbyist for increasing the pay, which in turn will raise the tone of the office and make it attractive to more capable or more interested incumbents.

Concrete evidence of the interdependence of private and public management of tuberculosis will be found in the case histories below.

My original intention to cite cases under each division heading was unsatisfactory, because it was soon found that the case history illustrating faulty or suppressed diagnosis, was frequently equally enlightening upon treatment, prevention and registration.

The following, then, are offered with little comment. They are for the most part given in the words of the field worker, who, in turn, has attempted to transcribe as accurately as possible the account given by patient or relative. They represent but a few of the many reports I should like to present. Indeed the difficulty has been to confine the number with a reasonable regard to the reading length of this paper.

Mrs. C., lived in a flat building. The woman upstairs had tuberculosis and spit carelessly in the yard and on the back stairs. Mrs. C. remonstrated with her and they had a quarrel, with the result that the woman with tuberculosis left the building. Soon after Mrs. C. began to feel badly. She went to a physician and asked him to

examine her. He said that she had a cold and a tonic would put her on her feet. She asked him to make a sputum examination, which she had read of. The physician laughed and said that it was all nonsense. At this she threatened to consult someone who would make the examination. The physician then sent the sputum to the laboratory and it was reported positive. She was admitted to the sanatorium as an early case.

Frank K. consulted three physicians. None told him what was the matter. All advised fresh air. As he was able to get no diagnosis, he lost confidence in regular practitioners and went to an Indian Medicine Man who told him that he knew what was the matter with him. He gave him a box of pills and extorted $70. for visits and medicine. The patient finally realized that the Indian was not helping him and consulted another doctor who both registered him and sent him to a free dispensary where he is now being treated.

Mr. K. consulted a physician in March and was told that he had a "cold" and must be careful. He was told to stay outdoors as much as possible, that he was in a rundown condition but would be better soon. The family of four were living in three rooms in a second floor flat. In October the little girl was refused books at the library because of a contagious disease in her home. The mother became frightened, went to the library and found that their family had been reported as having tuberculosis five months earlier. She tried to find out the proper precautions to be observed and learned the essentials of cure. Both the man and the wife had parents living in the country where he might have gone in March. He was sent into the country immediately, slept outdoors, had nourishing food and the family observed the precautions which they had learned, but it was too late. The man died in October. The wife was very angry, went to the physician and said "If either myself or children had contracted that disease it would have been your fault, because you did not tell us what we should do to prevent spreading of the infection, although you knew that he had tuberculosis. My husband might have had the necessary things for his recovery had we known it in time." The doctor said that he was sorry, but that he was afraid that if he told the man that he had tuberculosis, or that he had registered him, he might become angry and leave him. Other patients had done so.

A young man went to two physicians. Both of them refused to tell him what was the matter, but advised fresh air, separate dishes and care of sputum. The boy, in speaking of his case, said "It's awfully discouraging to go to a physician who won't tell you what is the matter and so I went to a "specialist" from Minneapolis who said he

knew just what was the matter and that he could cure me". The boy is obviously a very advanced case. As a result of the physicians' refusal to be frank with him, he has fallen into a patent medicine man's hands, is living a careless life and subjecting the whole family to the danger of contagion.

A man who was reported to the Health Department as tubercular never knew that he had tuberculosis. The physician told him that he must have fresh air and gave drugs. The man sat in the back yard and expectorated carelessly. The chickens of the neighborhood came over into the yard and fed. Here, also, the sputum which the man expectorated in the house was dumped on the ground. The next year four or five cases of tuberculosis developed in the immediate neighborhood and the wife is now a suspected case. In speaking of the case she says that "she never knew her husband had tuberculosis and how should she know that she ought to be careful".

A husband consulted a physician who told him that he had an "abscess in his lungs" and that "if he could get it off his lungs he would be well": "that it was not tuberculosis and was not catching". The physician signed the death certificate as tuberculosis and told that family that he had always known it. The little daughter died from spinal meningitis the next year.

A mother went to four physicians. The first said "kidney trouble", the second "heart trouble", the third "bronchitis", the fourth "asthma and a complication of diseases". The death certificate was signed "tuberculosis". None of the physicians told the woman of preventive measures. A daughter who has since married and become a mother is suffering from tuberculosis.

A widow was called upon and asked about one of her daughters who had been registered as a tubercular patient. The field worker found that the daughter had died a year before, that the home had never been disinfected and that there was now another daughter suffering with the disease. Trying to find out why the Board of Health had not disinfected, she discovered that the family had wished to bury their first daughter in their home town. The doctor told them that they would be compelled to have a metal casket if he sent the death certificate in as tuberculosis; consequently, he gave the cause of death as inflammation of the heart. The Health Department did not associate this death with the registered consumptive and there was no disinfection. The second daughter slept in the apartment occupied by the previous patient and is now an advanced case.

Charles W. called in a physician two weeks before his death. Doctor pronounced it lung trouble and told him that there was no

hope for his recovery; but did not register the case. The family called another physician who pronounced the case hopeless but registered it. The first doctor attended at death and signed the certificate as "inflammation of the heart". The Board of Health did not associate the one case reported of one physician with the death certificate of the other and did not disinfect. The mother with three small children is still living in the same apartment.

A physician registered a bogus name and address. When questioned he said that this was just the same, that all the city wanted to know was how many cases there were.

A woman G. C., was taken sick three years ago, consulted several physicians. The first one said "female trouble", the second one "asthma and general debility", the third "didn't know", the fourth "something the matter with her lungs" and told her to go West. The fifth said "pulmonary tuberculosis" that she must live outdoors, rest, take cod liver oil, milk, and eggs and be careful about her sputum. The woman is doing all of those things now. As a result of her first experiences she has to a certain extent lost faith in physicians and asked the field worker about the value of a "consumption cure" which costs $10.00.

Mrs. R. consulted eight physicians within the last year. Her case was pronounced "rupture" by the first physician, "hay fever" by the second, "asthma" by the third, "stomach trouble" by the fourth, "womb trouble" by the fifth and "tuberculosis" by the last three. In no case until the sixth had a sputum examination been made. Only the eighth physician registered the case. She is consulting no one at present.

A woman telling about the case of her brother's wife, said: "My brother was a very careful man. He went to a doctor and asked just what to do to keep the disease from spreading. He noticed that his wife was careful about her sputum only when in the house, and so he made her a little sputum cup to use in the yard. Not to hurt her feelings, he said, "it would be more comfortable". When asked about dishes, she said, "Why the doctor never told us. My brother was always very careful and he wanted to do everything and know everything that was right, but he didn't know about the danger of using the common dipper". The husband has now been sent south for his health. His wife has been dead six months.

A physician was reported to have said to a family visited: "There isn't any more danger in living with a tubercular patient than there is to go to a church, ride on the street cars or walk on the streets". In the physician's presence a friend who was caring for the consumptive

girl often kissed the patient and drank out of the same dipper. Upon the first girl's death the chum went home and complained that she did not feel well. The doctor said it was a run-down condition and asthma. She died soon after and the death certificate was signed spinal meningitis. Physicians who knew the second girl and who had watched her case, firmly believed it to be tuberculosis.

A woman whose husband died of tuberculosis a year before, told the following story: "Several years ago a sick woman boarded with us. The doctor told me that she didn't have tuberculosis. When she left the house, of course, we didn't fumigate. When she died a few months later, we found that she had had tuberculosis".

"Then I took another boarder and he began to feel sick. He asked the doctor if he had tuberculosis and the doctor said, 'no, he did not'. He coughed and spit a great deal. When they took him to the poorhouse we, of course, didn't fumigate. When he died he was reported in the papers as dying from consumption".

"The next month, my husband got consumption. We moved then and sold the first house. My husband was sick four years, and we used up all the money that we got from the first house, and when he died we were $500 in debt. We took the $2,000 life insurance and paid the debt and the funeral expenses. My twenty-year-old son went to work on the railroad as a brakemen. The panic came and they laid off the newest men. After that he went into a stove factory and caught cold by walking home in his sweaty clothing and got consumption. This doctor was a very good one, and he told us right away about his disease and how to take care of him. We needed the money and the boy didn't stop working. He died the next year. This time I knew about tuberculosis and I had the house fumigated. Now the eldest son, a boy of sixteen, is working to support the family and the boy of thirteen peddles papers".

The whole story might be said to be the result of one doctor trying to prevent a tubercular patient from being turned out of a home. It was weak-kneed kindness to the patient which brought in its train misery and death to a number of innocent victims, many more no doubt than we know of.

A prominent business man in one of the smaller cities of Wisconsin called at the office of the Wisconsin Anti-Tuberculosis Association upon business of the association. He has for two or three years lead one of the best local campaigns in the state. In the course of conversation he stated that his son had been pronounced tubercular by one of the most prominent internists of Chicago.

He showed me the letter of instruction from the physician. There

was no way of obtaining a copy of that letter without explaining why I wanted it. The letter advised little, if any, more than that the boy be not allowed to overdo, that he sleep out-of-doors, and be given an abundance of wholesome food.

The mother of that boy died of tuberculosis and the father on his own initiative suggested that he would watch him carefully realizing that he ought to be in a sanatorium.

Had the consultant merely made the suggestion, the boy would have been given every possible advantage.

A man was examined by a physician generally considered reputable. Sputum examination done outside of office was negative. Physician reported it positive and instituted tuberculin treatment. After a few injections he reported the patient well. The patient was advised to institute malpractice suit by an indignant friend who knew about tuberculosis. He was a peaceable simple man however, and was "content to have gotten off so easily and cheaply".

Mr. M. consulted four physicians. All pronounced it tuberculosis. Only the last doctor registered the case. The man moved three times in his illness. None of the houses was reported or disinfected. The family is now careful having received instructions regarding the proper care from the Metropolitan Insurance Company's leaflets.

One physician who attended a woman in her home never told her that she should sleep alone. She slept with her two daughters one of whom is now suffering from tuberculosis.

This same physician attended another case, pronounced it typhoid fever and then just before death said tuberculosis. He never mentioned care of sputum, fresh air, separate dishes or sleeping alone. The mother slept with four children. One of those children is suspected of having tuberculosis.

Miss W. talked of her sister who had died one month before of tuberculosis and told of her struggle for health. She told of her sister gradually growing weaker, her consultation with her family physician, who refused to tell her what was the matter with her until the day when he told her that she had consumption and could not live. Frantically she consulted her friends and was told of a place "where they kept people and made them well for nothing". Delighted, she told her family of this place but her brother-in-law scoffed at the idea. She still asked about it; asked her doctor, asked her friends, but no one could tell her. Finally, after walking all day and not finding out, she came home and gave it up. Perhaps, in the last stage of her illness, she would not have been received but why had she not been told in the incipient stage?

What response is possible to the comment of the sister— "oh, the doctors,—they are always so busy. They just question you a minute, give you some medicine then take your dollar, but they don't want you to go away, for then they would not again get your dollar".

A mother was the last of three cases in one family. They lived in a dirty home and five people slept in two rooms. They have had the same physician for all cases; but have never been given any instructions regarding care of sputum, separate dishes, or sleeping alone.

Conclusion. If the data presented above are correct, they offer an indictment of the medical profession of Wisconsin. An indictment of the regular medical profession is an indictment of you and of me, for we, of the medical profession, stand committed to a principle which precludes one member taking to himself authority to set a standard of medical practice and call upon the general public to adopt that standard as against the practice or opinion of existing authority. The non-medical public has demonstrated its incapacity to judge between the real and spurious in medical science and is, therefore, much less qualified to set a standard of practice than is an individual physician or medical sect. However, if we do not upon our own initiative determine and assume responsibility for the medical phase of the tuberculosis problem, I warn you, we will be put upon the defensive, and our prerogative assumed by the non-medical public. Such data as has been collected by the Wisconsin Anti-Tuberculosis Association could be obtained by another agency, one antogonistic through ignorance or cupidity.

If the strong, honest and capable physicians choose to cast their lot with the moral and mental weaklings, the scourge of a public which lacks discrimination will raise larger welts upon the more sensitive skins of the righteous than it will upon those already callous.

What are we going to do about it? I hope that I have succeeded in convincing you that there is sufficient warrant for a close intensive study of existing conditions by a commision of this society. The commission should be furnished with sufficient funds to secure the services of a paid worker, and be vested with authority to apply the remedy indicated after the diagnosis has been made.

In the mean time detailed written or printed instructions, one of the many splendid books or pamphlets, given to the patient will not alone absolve the physician from a possible charge of carelessness, but will facilitate the work of instruction. The businesslike precision of the physician who takes this method of supplementing or supporting his verbal instructions is appreciated by the patient.

The solving of the tuberculosis problem is not at an end. The

world-wide campaign of over five years standing offers a strategic opportunity, a point of contact already fairly well secured between the medical and non-medical public. As this contact is broadened and mutual respect and esteem are thereby fostered, a solution will be found for many of the perplexing problems which beset the practice of medicine today.

**Discussion.**

Dr. G. E. Seaman, Milwaukee: The time has come when through the influence of the widespread campaign against tuberculosis the people are beginning to learn the fundamentals with respect to the prevention and treatment of this disease, and it has been my experience that the profession in Wisconsin—and I believe that that is the general experience—seem in many respects to lag behind the people in giving evidence of their appreciation of the facts that have been revealed by the studies made upon this subject and by the work that has been done.

I think that the very last point that Dr. Dearholt made is one of great importance, and that is that when a physician examines a case of tuberculosis he should not let that case go out of his office without printed instructions as to what they should do and how they should proceed; and the many associations in the state and throughout the country have those printed directions in very handy form; they can be easily obtained by any physician, and I feel very strongly that the physician has not done his duty to the patient unless he gives to that patient not only verbal instructions of the most definite and specific kind, but printed instructions as well upon which the patient may act.

Now, I take it that if one were to make a study of any disease, not only tuberculosis, but any disease—such a study as was made by the anti-tuberculosis association—that they would find patients and relatives of patients reporting many things, particularly what this physician has said and what that physician has failed to say and do. The data that Dr. Dearholt presents here is made as reliable as possible, but of course some allowance must be made for exaggeration, and some allowance must also be made for failure to present the situation exactly as it was on the part of the patient and the relatives of the patient. The fact remains, however, that many physicians fail to fulfill their duty in giving tubercular patients the advice which they should.

In the Blue Mound Sanitarium, which I have been interested in from the beginning, we have frequently come in contact with cases where good physicians, some of the best that we have in this state, have stated in an offhand manner after making examination, "You have tuberculosis," or "You have disease of the lungs, you better go south or west," or do this thing or that thing, in a very indifferent manner,—and I have oftentimes been surprised when those patients have been directed to the Blue Mound Sanitarium by other agencies than their family physician, to have them present that statement of facts, that the doctor had advised them to lay off for a few weeks and go fishing or to go south or to go west; and when you make close inquiry into the way in which the case was handled you very readily arrive at the conclusion that it was not handled in the definite and specific way that all of those cases should be handled by every physician that comes in contact with them.

Dr. T. L. Harrington, Milwaukee: I do not know that I could offer any suggestions on this subject, because I have hardly had the time to digest the contents of the paper. I would say in the first place that we should make a certain allowance for the statements made by this field worker who got the best answers he could. We know from the experience of one physician of a patient coming to our office who has been to some one else's office, and the statements carried by that patient are very often incorrect. I think all of us have learned that, and for that reason I think we must make a certain allowance for the statements that appear in this paper.

Yet in spite of that I am ready to believe that a great portion of this indictment that Dr. Dearholt has drawn up against the profession in Wisconsin is true, and it goes back to the education of our physicians.

I believe that we are not careful enough in the training of our physicians along this line, and I believe that our medical societies are not agitating this question sufficiently and making the physician realize the important responsibility which he holds in this work.

What Dr. Dearholt has said I believe is true, that the handling and diagnosis of a case of early tuberculosis is oftentimes of more importance and requires more skill than opening the abdomen, and yet the average physician is not at all compensated for his study, and the instruction which he gives his patient in the diagnosis in an early case of tuberculosis. We need to take a stand on that matter. We need to make our patients realize that when a physician has made a diagnosis of tuberculosis in the early stage and has definitely and positively laid down rules for the guidance of his patient, that he has rendered a service to that patient that cannot be paid for in money.

It has been my custom where I have made a diagnosis of tuberculosis to give to the patient a book written by Dr. Lawrence Flick, of Philadelphia, entitled "Tuberculosis a Curable and Preventable Disease." I tell my patients after I talk to them for a time that this book will tell them much more than I can tell them in many hours of sitting. The book is written in an encouraging strain, and instead of discouraging the patient who has tuberculosis, offers that patient a great deal of encouragement, and I believe that is very important.

So that I am very glad indeed that this paper has been read. I think it will mean much to the men who are here this afternoon, and I trust the members of the state society will go back to their county societies and continue this agitation until a realization that is much greater than it is at the present time takes hold of the profession in Wisconsin, in order that we may do this full duty along this line.

Dr. W. E. Durr, Milwaukee: Mr. President, this paper when it is considered as it should be is perhaps one of the most important papers that will be read in this meeting; and yet I dare say that pretty nearly everybody that is here and heard this thing will go right home to their different districts, and forget all about it, and that is about all the good it will do. It will do just as much good as something I heard of at the meeting of the previous legislature at Madison. The information I refer to was gained from an attorney of some repute, a man not given to exaggeration, who was present at some committee meetings and happened in on the committee meetings of

the Committee on Health, when the subject of taking care of the cattle of Wisconsin was up. He said that it was acknowledged from careful statistics that should all the tubercular cattle in the state of Wisconsin be carefully cared for and killed and the farmers remunerated that it would bankrupt the state of Wisconsin. And yet nobody paid any attention to it. People sat there and did not care. One fellow said: "What do I care, I haven't got consumption."

Now, there are a good many things that perhaps you did not recognize that have been cited in this paper. That little incident of the chickens getting hold of that tubercular sputum and chasing into the next yard and scattering tuberculosis there is of great interest. Do not forget that anything that pertains to tuberculosis today pertains to you and me. We need not think that we are guarding somebody else; we are guarding ourselves primarily, and just as sure as something is not done, just as sure as we do not take more care of and pay more attention to these conditions, we are going to have this thing to fight right at home ourselves. That is where this question hits. It is not that it hits some one way off in the southwestern part of the state; it is hitting right home; and this question of tuberculosis in all its forms, as we see it today, is something terrible. When one family is wiped out another moves into the same house. Who tells them they ought to have that house fumigated, and how it should be fumigated? It is fumigated in the same way as perhaps we find a house fumigated in a case of diphtheria that I recall. The case recovered, the house was fumigated all right. That followed house-cleaning time. The next house-cleaning time the carpets were all taken up very nicely, and a new case broke out in the same house. The mother, quite an ordinary individual, recognized the fact that there was diphtheria there, and that that diphtheria came from her not having taken up those carpets and having the house thoroughly fumigated. The same thing is true of tuberculosis. How many of us know when we are getting into a new house or a house that has been occupied, whether they have had tuberculosis or not? And we are getting right in there and catching the thing.

This thing is of importance and is a thing that each one of us here today should not go home and forget. I tell you that I think the statements made in that paper by Dr. Dearholt are true. Only I do not think he has told them half strong enough.

We put a nurse on a case of tuberculosis. How many of the doctors tell that poor simple thing that comes in there what to do to see that she does not catch it, to say nothing of the other members of the family? This is a very serious thing, and I do not think any of us should leave this place today without going home and working hard and very hard at that.

Dr. G. Windesheim, Kenosha: Ladies and Gentlemen: When I first heard of Dr. Dearholt's paper I intended to say something in regard to it along the same lines, but Dr. Seaman and Dr. Durr and Dr. Harrington have practically taken the wind out of my sails.

The only point that I wish to speak of or remind you of, is the point that was made by several, that the average physician is not compensated for his work in diagnosis. Now, I believe, that is so. But whose fault is it? It is nobody's fault but the average physician's fault that he is not compensated

for his work in diagnosis. When you make an examination for tuberculosis, examine the chest carefully, make a sputum examination, if necessary, use any of the tests and you are entitled to your fees and to a good fee, and the patient will appreciate the fee that you charge. The higher the fee the more the patient will appreciate you. If you do not charge but 50 cents or a dollar for that consultation you are not paid for your work, and your patient is not satisfied but will go to some one that he calls a specialist who will charge him $10 for no more work than you have done.

The paper of Dr. Dearholt to my mind was an indictment against the medical profession of Wisconsin. It has been said here that we must take with a grain of salt, so to speak, the statements made about the physicians. However, you and I know if we look over the doctors of our acquaintance and possibly look down deep into our innermost heart, we will know that the statements of the patients are not exaggerated.

I come from a town where there are 35 physicians in active practice. We can guarantee that out of the 35 there is just about one-quarter who will be honest enough with their patients when they come to them for an examination to be thorough in the matter of examination, and will give the patient a statement of the facts, an opinion, as giving the diagnosis and will give them time enough to advise them, as has been suggested here by pamphlets or otherwise as to their further conduct, and in order to prevent the spread of the disease.

Now, if this is true in my town it is probably true in other towns and around through the country. That the physician should hesitate to tell the patient that he has consumption is at the present day absolutely without excuse. 20 or 30 years ago, before the knowledge of the manner of the spread of consumption was well established, before the public was educated to the fact that consumption is a curable disease and that consumption can be absolutely eradicated from this land and from the whole world if every one will do his share towards it, at that time there was an excuse for telling the patient "You have a bad cold" or something of that kind—there was an excuse for keeping the patient in the dark in regard to his condition, because it meant a discouraging state, it meant practically a death certificate; but at the present time when we know that 35 per cent. of all cases of tuberculosis can be cured and 90 per cent. of all incipient cases can be cured, as shown by the statements of the sanatoria, and even far advanced cases can be cured, I say there is no excuse for keeping the patient in the dark in regard to his condition.

Another thing: Within the past few years, thanks to the work of the Wisconsin Anti-Tuberculosis Association and the local anti-tuberculosis societies, the public have been educated to the point where they demand to know those things, and they want to know what is the matter with them. They are not afraid of tuberculosis any more and it seems absolutely inexplicable to me that there should still be physicians who will stand back and not take hold of this movement to spread the knowledge still further. Why should it be necessary for the anti-tuberculosis association to be continuously hammering at the physicians, continuously talking to them trying to get them to do what is right? It did not take so very long for the people to accept the antitoxin of diphtheria. At first there was a fight. We all know that when we first came with the antitoxin syringe the people said, "Not that, I would

rather let my child die"; but they demand it now the same as they demand the advice of the physician in the case of tuberculosis. It has come to pass now that many people will come to your office at the first sign of a cough, because they have learned that that may mean beginning tuberculosis. Give them the benefit of your knowledge and do not for any reason whatever keep them in the dark about their condition.

I think that the members here present when they go back to their homes ought to make a point to stir up their county societies, their cities and counties, and everybody, and every physician in the state especially. Let every one try to do what is right towards his patient, and if he does not get pay for his diagnosis it is his own fault. If for some reason or other it is not his own fault, he will do it with a clear conscience and knowledge that he has done the best that was in him for the sake of humanity.

Dr. C. H. Stoddard, Milwaukee: The facts that Dr. Dearholt has brought out constitute a rather startling arraignment of the profession, but I think if a survey were to be made two years hence, judging by the pressure that is being brought to bear on the profession, we would find that the statistics would be entirely different. The pressure being brought to bear is being brought by the people themselves. There is no question but what the campaign of education is bearing fruit, and I have found people in the most humble walks of life who have a most unusual knowledge of the natural history of a case of tuberculosis and the means whereby it can be diagnosed and cured. People go directly to the health department with their bottles of sputum, simply suggested to them by their neighbors, and the physician out of self defense is going to take time by the forelock and instruct his patients rather than have them go about it in another way.

I am going to call your attention to a committee which exists as stated on the second page of this program, a committee on the prevention of tuberculosis, which has been in existence as a standing committee for the last four or five years, and I happen to be one of the committee; and I will say the committee has done no work whatever for the last two years. I would suggest in the reappointment of the committee by the new administration, that the committee be instructed to conduct a campaign of education among the profession.

Dr. George H. Fellman, Milwaukee: I just wish to say something in regard to the difficulties of the diagnosis of tuberculosis. Dr. Windesheim has mentioned examination of the sputum as one means of diagnosis. In the examination of patients for the state institutions, especially among the Jewish race, I find that you cannot depend upon the sputum examination as an evidence of tuberculosis. In at least 50 per cent of the cases of the Jewish race that come before me for the state institutions you do not find tubercle bacilli in incipient cases. You may get the typical skin reaction, but not the tubercle bacilli in the sputum in these incipient cases.

It is not an easy matter to make a diagnosis of tuberculosis. Patients come to you with a cough, loss in weight, you look the chest over and you cannot find physical findings of tuberculosis. Will you tell that patient to quit his work upon which his family is dependent and make his family starve or make him dependent on the poor office? You cannot do it. Many of those patients do not have any fever. I have seen hemorrhage after hemorrhage,

with temperature normal, though the lung findings were positive, and that, too, with no bacilli in the sputum. I do not believe that we as physicians should be condemned so strongly as Dr. Dearholt has said. We are to be condemned for our neglect if we fail to tell the patient the facts as we find them, but to condemn the whole body of physicians for not doing this or that, because one patient says this and another patient tells them that, is unfair. You know from personal experience how little we can depend upon many of those statements. So I am heartily in favor of registration; I am heartily in favor of telling the patient and educating the people; but don't think because you cannot find tubercle bacilli in the sputum that your patient is not possibly suffering from tuberculosis.

PRESIDENT: We are fortunate in having just at this time a man not of our own state, Dr. Cabot, and if he will kindly speak to us we will be very grateful to him.

DR. RICHARD C. CABOT, Boston: I am afraid before you get through listening to me, you will wish that this opportunity had not been given me by the President. At the same time I cannot help being glad myself, because I want to have the opportunity to record my most hearty thanks to Dr. Dearholt for this paper. It was stated that it would probably be one of the best papers in these meetings; I think it is one of the best papers I ever heard in my life, and I have been hearing papers for a long time. (Applause.)

That paper as it stands is, as has been stated, an indictment of the medical profession here. It is exactly as true in Massachusetts as it is here, as just exactly the same facts exist there to my knowledge.

It has been said that perhaps a good many of these statements of the patients about the physicians are exaggerated, or wrong, and I am quite willing to believe it; but I know from my own certain knowledge that the vast majority of the physicians in Massachusetts cannot make a diagnosis of early tuberculosis, and I know that, not from what physicians or patients have said to me, but from my own supervision of these men under my own teaching. I have a post graduate course each summer where I see a good many men from my state and other states, and I put them up against cases of incipient tuberculosis mixed up with normal cases, and they cannot tell the one from the other. I do not believe one-tenth of the physicians in any state in the Union can tell incipient tuberculosis when they see it, from physical signs. You should not believe, therefore, that conditions are worse in this state than in others. The indictment is a true bill against the whole profession.

If you will excuse me, I will make a few remarks in relation to the most positive side of this matter. Dr. Dearholt's modesty and the limits of his time did not allow him to say all he would have liked to say in regard to what should be done. But Dr. Durr and other physicians have laid stress on the fact that we should get busy and do something—not merely investigate, inquire or consider, but do some of the things that we already know we ought to do.

One of the things we ought to do and do right off, in my state and your state, is to have practical examinations for state registration. We do not have them in Massachusetts, and I understand you do not have them here. I mean examinations in which a candidate for registration is put up against a patient

having incipient tuberculosis and told to come out with a diagnosis. I believe that would throw down a large proportion of the candidates in my state, and I would not be surprised if it threw down one or two in yours, (Laughter) because as has been said by some gentlemen here who probably know as well as any of us, this diagnosis of incipient tuberculosis is a very difficult thing for any one to make.

I was very glad that the point was brought out that the presence of tubercle bacilli in the sputum is generally the evidence of an advanced and not an incipient lesion. We do not except rarely get them in the incipient cases. We have to fall back on physical signs and history, and some of these signs are so slight that from what I know of the capacity of auscultation of many physicians, I am quite sure they would not hear them. We ought then to have practical examination for state registration all over the country, and they ought to be searching examinations.

We ought to give instruction to patients, but, gentlemen, in my opinion, it will never do much good to depend on printed circulars of instruction. Why? Because I have written some, and given out many thousands of those circulars, and I have tried them pretty thoroughly in and out and up and down; and I do not find that their value is at all comparable with the value of personal instruction.

Why do not people follow those printed instructions? Consider what those instructions mean. They mean a radical change of several habits. Now, if any of you have ever made a radical change in some of your fixed habits, you know it is not an easy thing to do; and that you do not do it because a man hands you directions on a printed piece of paper; you do not do it without the strongest kind of support and clearest kind of understanding of how and wherefore. It has got to be personal instruction and not printed instruction. Detailed, long, time-consuming, very expensive from the physician's point of view, very difficult—but it must be done that way.

Now, I come to the only other point that I want to make. We have been blaming ourselves here, and I am sure we should rather blame ourselves than have the public blame us. We have been blaming ourselves because there are so many of these patients who have not been told the truth, or not told it early enough, by their physician. But we have got to face the fact that this matter of telling the truth is not a matter of scientific accuracy and acumen. It is far more a matter of moral and financial courage, and it takes a great deal of moral and financial courage. We might as well face the matter squarely.

The men that I know, and I know a good many, who are trying to make a living out of tuberculosis are most of them making a mighty poor living. Why? Because the well-to-do patients get out of town and away as fast as they can, and the poor find they can learn the facts from books or printed directions and do not think it is necessary to visit the physician any more. In other words, when the physician makes this true diagnosis and gives true directions, he must face the fact that he is cutting himself off from so much income. I do not mean to say there is a man here who would not do the right thing; but I say when we face that fact, not only in this disease, but in other diseases, in which the recognition of tuberculosis is the entering wedge, we must realize that we are facing grave financial dangers for a considerable portion of the whole profession. If we did what we tell each other we ought to do, not only in relation to tuberculosis but all other diseases, where

full knowledge and directions are needed, many of us would have to give up practice.

And I think, facing that, we have got to realize the fact, which I believe to be a fact, that we have got to make provision by establishing in every large center free dispensaries for tuberculosis, with paid physicians, the best in the community, paid to give their whole time to the early diagnosis and treatment of tuberculosis.

In Boston now, I am glad to say, we have a municipal dispensary for tuberculosis, and pretty much all the tuberculosis among the poor goes there, and we have at the head of that institution paid physicians with good salaries, who therefore do not have to consider their bread and butter in telling the truth and giving the correct directions. We have got to do this, it seems to me and we have got to recognize that in doing it we are making the beginning of a very momentous change in our whole profession. The profession are beginning to be public servants, paid out of the public resources; and I believe within one or two generations a large proportion of this work is going to be done at the expense and for the good of the public, and on the whole, for the good of the profession. (Great applause.)

Dr. Dearholt: (Closing.) I am thankful, grateful and very much flattered by the generous discussion of this paper. I want merely to say in answer to Dr. Fellman's criticism, the indictment is not my indictment, as I distinctly said; it is an indictment of me as well as of the rest, because I maintain that I am quite as much a physician as any of you.

One other word about this matter of compensation: I do not think we are going to get very far if we do not offer some hope for the physician who does do the unselfish thing. I believe, as I said here yesterday afternoon, that my semi-detached position gives me a view point that makes me positive that the public stands ready to meet the doctor more than half way. While, perhaps, there will not be the very large fees from the practice of medicine, the public does stand ready to give dollar for dollar in value to every physician for the work that he does for the public, and it will only be a question of training that public to a realization of that standard. (Great applause.)

---

## RABIES IN WISCONSIN AND ITS CONTROL*

BY MAZYCK P. RAVENEL, M. D.

DIRECTOR STATE HYGIENIC LABORATORY, PROFESSOR OF BACTERIOLOGY, DIRECTOR PASTEUR INSTITUTE UNIVERSITY OF WISCONSIN.

In the March number of the Wisconsin Medical Journal in conjunction with B. W. Hammer, I published an article entitled "Rabies in Wisconsin". In that paper, in speaking of the distribution of rabies in United States, we quoted from Doctors Kerr and Stimson

*Read at the 65th Annual Meeting of the State Medical Society of Wisconsin. Waukesha, June 9, 1911.

of the Public Health and Marine Hospital Service, who had made a very careful study of the distribution of the disease, a statement that it was almost completely absent from the western portion of our country, especially west of the Rocky Mountains and the Pacific coast regions. The article referred to was published in 1909. A private letter from Dr. Kerr states that since that investigation there have been several outbreaks of rabies reported west of the Rocky Mountains. This is significant as showing the rapid spread of the disease throughout our country and justifies the prediction made in that paper that "under our present laws, or rather lack of laws, there is little doubt that the disease will continue to spread". A spot map in that paper showed the distribution for eighteen months in the State of Wisconsin. The present epidemic from which our state is suffering began about three years ago in the neighborhood of Beloit and has gone steadily northeast. Since writing that paper a number of cases of rabies have been sent to the laboratory from the neighborhood of La Crosse, and some scattering cases have come from the eastern and southeastern portions of the State. This is evidence that the disease is continuing to spread in our own state.

In March we reported 126 cases treated by the Pasteur inoculation in Madison. The total number now reaches 164. Of these eight began the treatment at Madison, and had it continued at their homes, obtaining the vaccine from H. M. Alexander & Company, Marietta, Pennsylvania.

The animals inflicting the bites have been:—

| | |
|---|---|
| Dogs | 149 |
| Cats | 3 |
| Cows | 3 |
| Horses | 4 |
| Human | 5 |

| | |
|---|---|
| Patients bitten by animals known to be rabid | 122 |
| History of rabies | 34 |
| No evidence | 3 |
| In contact with human rabies | 5 |

Location of bites:—

| | |
|---|---|
| Face | 19 |
| Hands | 85 |
| Lower extremity | 36 |
| Upper extremity | 12 |
| Bitten more than once | 12 |

Treatment of dog bites.

A review of the cases sent to us for the Pasteur treatment has shown a wide and remarkable diversity of opinion among the physicians of the state as to the treatment of a bite supposed to be by a rabid dog. According to the statement of the patient, the following applications were made:—

| | |
|---|---|
| Carbolic acid | 27 |
| Carbolic salve | 1 |
| Hydrogen peroxide | 13 |
| Tobacco | 2 |
| Water | 4 |
| Drawing plaster | 1 |
| Flax seed | 1 |
| Cauterized (?) | 11 |
| Carbolic acid and nitric acid | 1 |
| Iodine | 3 |
| Hot water and salve | 2 |
| Nitrate of silver | 2 |
| Vinegar and tobacco | 1 |
| Salve | 1 |
| Carbolic acid and alcohol | 1 |
| Caustic | 2 |
| Vaseline and alcohol | 1 |
| Carbolic acid and turpentine | 2 |
| Salt water | 1 |
| Antiseptic | 1 |
| Nitric acid | 1 |
| Carbolic acid and Iodine | 2 |
| Turpentine | 3 |
| Oleoid | 1 |
| Alcohol | 3 |
| Pain Killer | 2 |
| Vinegar and water | 1 |
| Liniment | 1 |
| Boracic acid and alcohol | 1 |
| Hydrogen peroxide and alcohol | 1 |
| St. Jacob's oil | 1 |
| Formalin | 2 |
| Acid | 1 |
| Carbolic acid and salve | 1 |
| Carbolic, arnica salve and boracic acid | 1 |
| Borax water | 1 |

| | |
|---|---|
| Brandy | 1 |
| Camphor | 1 |
| Hot water | 1 |
| Hot boric acid | 1 |
| Iodine and alcohol | 1 |
| Calcium Hydrate | 1 |
| Alcohol and iodine | 1 |

In forty-four cases no treatment was given, and in several others no satisfactory statement could be obtained.

This subject has been very carefully studied experimentally and it has been demonstrated that fuming nitric acid is by far the most efficient agent which can be used to prevent the danger of the dog bite. Where the wound is not ragged and lacerated so that all parts of it can be thoroughly reached the application of fuming nitric acid apparently removes all danger of hydrophobia. Next to this agent solutions of iodine seem to have the most power. In all cases before using a caustic free bleeding should be encouraged and the wound washed with warm sterile water.

The control of the disease is simple in theory, but in the United States offers difficulties which at the present time seem to be almost insurmountable. This is due to a lack of uniformity in our laws and in their administration. There are very few states in the Union which have within themselves efficient machinery for blocking an outbreak of rabies. This will come I believe when the necessity for it is recognized by everyone. The remarkably efficient way in which our Goverment has handled outbreaks of foot and mouth disease, pleuro-pneumonia, etc., indicates our ability to do what is once undertaken. In health matters I am strongly in favor of centralization and I believe that this matter must be taken hold of by a strong central authority before we can hope for any amelioration of the situation as regards rabies in the United States.

We have the history of two shining examples of what can be done by proper authorities in this disease. In England for some years pervious to 1889 rabies had been dealt with by local authorities. In that year 312 cases occurred. The central authorities took hold of the matter and in three years reduced the number of cases to 38. Petitions signed by thousands of persons were circulated protesting against the restrictions imposed, and the matter was again turned over to the local authorities. The next year showed an increase from 38 to 93 cases. This had risen to 248 in one year more, and to 672 by the third year. Efforts by the local authorities reduced the number to 438

cases. Then the central authorities again took hold and in one year the number had dropped to 151, and in the year 1900, just three years later, — no case of rabies was reported in England. Since that time the disease has been practically unknown there. A rigid quarantine is enforced against all dogs and England has been kept free from the disease. The same is true in Australia and New Zealand where the disease is unknown. Germany by strict regulation has almost succeeded in banishing the disease, but along the frontiers it is still seen too often.

More remarkable even has been the result of the campaign in the Department of the Seine in France, which includes the city of Paris. The late Professor Nocard, the great scientist and veterinarian, said that the Department of the Seine was a hot bed of rabies which was unique in the world. In 1901 there were 846 cases of rabies in dogs reported in this district, and the same year 12 deaths in human beings occurred from the disease. In 1909, there were only 13 cases of rabies reported in this Department of France, and since 1905 there has not been a single death in human beings. The Pasteur Institute which in 1901 treated 623 patients, in 1909 had only 105. In other parts of France there has been improvement also, but as the execution of the preventive measures is not nearly so strict, the results are not nearly so good. In 1901 the other Departments of France reported 1872 cases of rabies in dogs. In 1909 this had fallen to 1450. The measures in France differ from those carried out in England. While England depended largely on the leash and muzzle, the Department of Seine has depended on the destruction of stray dogs, and the enforcement of dog tax. In 1901, 140,000 dogs were taxed (or licensed) in Paris and its environments. In 1909 this number had risen to 185,000. The destruction of stray dogs seems to have begun as far back as 1883 in which year 4094 dogs were destroyed, but no sustained effort in this direction seems to have been made until 1896, since which time an average of about 12,000 dogs a year have been destroyed. Since 1882, 288,850 stray dogs have been destroyed in Paris and its surroundings, 128, 821 of these having been destroyed during the last ten years. The result of these combined efforts, — namely the destruction of stray dogs and the enforcement of the dog tax,— is very striking when put into figures. In 1901 during which year 140,000 dogs were licensed there was one case of rabies for each 0.604 taxed dog. In 1909 this had dropped to 0.007. Taking it in five year periods makes also a striking contrast. In five years 1900 to 1904, there were 2748 cases of rabies in the Department of the Seine,— in 1905-1909 only 287 cases.

These results in Paris are in many ways more remarkable than those obtained in England. France has more than three and one-half million licensed dogs. The dog population equals 75 for every thousand people, which is more than double the proportion in England. The Departments surrounding Paris do not enforce the laws strictly, whereas in England,—small country isolated by water,—equal laws were applied throughout the island, and a strict quarantine protected them against the importation of the disease.

It is useless to quote figures from other countries which have done good work. England and the Department of the Seine stand out as striking examples of what can be done by regulation. The principal points in the control of rabies are,—

First, the enforcement of a dog tax.

Second, the destruction of stray dogs.

Third, the enforcement of the muzzle and leash.

Fourth, the strict quarantine for a period of at least ninety days of all dogs exposed to rabies.

---

## THE TREATMENT OF PUERPERAL INFECTIONS.*

BY FRANK W. VAN KIRK, M. D.,

JANESVILLE.

There is no subject of greater interest to the general practitioner than that of the treatment of a case of puerperal infection, for there is no class of cases that causes as much comment in a community as a death following such an infection.

In taking up this subject of the treatment of puerperal infections, I will speak briefly on the prophylactic treatment, the etiology and the pathology. The prophylactic treatment should begin at the time a practitioner makes the diagnosis of pregnancy. From this time until term there is really no indication for any further examination to be made, unless some complication arises. In all examinations of pregnant women, I believe that rubber gloves should be worn. After a thorough cleansing of the hands, if sterile gloves are used in all these examinations, it practically excludes all possibility of carrying any infection into the vagina. I feel that there is no hand solution that we use than can make us confident as to this point.

---

*Read at the 65th Annual Meeting of the State Medical Society of Wisconsin, Waukesha, June 7, 1911.

At the time of delivery, at term or in a case of inevitable abortion, the parts should be shaved and thoroughly cleansed. If there is any question of a fecal accumulation, an enema should be given. In the presence of a purulent vaginal discharge, or if one is in doubt as to whether repeated examinations have been made before the patient came under his care, a sterile vaginal douche should be given. All these measures tend to lessen the possibility of an infection.

As to the etiology, the bacterial examination of the discharge has given a very great variety of organisms as the different causes of the infection. The most frequent organisms found are: the streptococcus, the gonococcus, the colon bacillus and the staphylococcus.

A recent article in the Journal of the American Medical Association, by J. Whitridge Williams, of Baltimore, reviews the history of puerperal infection in the larger hospitals of Europe and the United States before the aseptic era and the death rate given is appalling. We have come to look upon a case of puerperal infection in the majority of instances as a hand infection, so all means taken to prevent the same are of especial moment, not only to the patient, but to the attending physician.* In the treatment to be outlined, the variety of organism found in the discharge has not influenced the general treatment used in any way.

The pathology of these cases as we all know is varied, from an infection of a slight tear of the perineum to the involvement of the entire generative tract in the inflammatory process and in many cases extension to the parametrium and the peritoneum. At other times, due to the virulence of the infection, there are no local lesions to be found, but a rapidly fatal septicemia is present. The pathology of the different lesions cannot be taken up at this time.

The treatment to be outlined in this paper is based on a series of 70 cases, 61 of which I had the privilege of studying, while assistant to Dr. T. J. Watkins, of Chicago. Nine cases have been added to the series since that time. The treatment of these later cases has been identical in principal with the first 61, so I shall include them.

These patients were all referred from some other physician or entered the different hospitals on the regular service. In consequence, reliance could not always be placed on the statement of how much instrumental manipulation had been done before the patient entered the hospital, particularly in the cases of infection following an abortion or miscarriage. 50 cases of the series followed an abortion or

*In cases where a double pyosalpinx develops it is generally considered as due to a gonococcus infection.

miscarriage, and the remaining 20 were infections following term pregnancies.

On entering the hospital a careful complete history was taken and a thorough examination made, in order to determine how we were to proceed as to the treatment. A blood examination was always made on entering and every few days while the patient was under our care. A great variation was found in the leucocyte count. This leucocyte count was often of aid in making a prognosis. In the presence of a high temperature and an exudate, a high leucocyte count was considered more favorable than a low one. It showed that the body was doing all in its power to overcome the infection and establish an immunity. One case was of interest, in that on entering the hospital the patient had a high fever, a large pelvic exudate and a profuse purulent vaginal discharge, the leucocyte count was low, no improvement was noted until the leucocyte count began to increase, when it was rapid and the case went on to a complete recovery.

The examination of the vaginal discharge was not done as a routine measure. The result in the cases examined was not always satisfactory and we did not feel that the finding of any special organism would have any influence on the treatment to be employed.

Our only indication for exploring the uterus was the presence of bleeding or a foul discharge. We felt sure that if there were any retained membranes, a foul discharge would soon appear, and that it would be safer to wait than to do any needless meddling without one or the other of the above mentioned symptoms. The presence of an exudate or a high fever, or both, without the above mentioned symptoms, would call for supportive treatment.

In the majority of cases. when there was a suspicion of there being retained products of conception, even those with a high temperature, bleeding, or a foul discharge, the uterus and vagina were packed with sterile gauze and this was allowed to remain for from 24 to 48 hours, if necessary. Often before this time, the gauze and retained tissue were expelled into the vagina. In a number of cases of inevitable abortion, the uterus and vagina had to be packed a second time, in order to get sufficient dilatation of the cervix so that the finger or the placenta forceps could be introduced. In a number of cases where all the tissue was expelled, the uterine cavity was not even explored by the finger. We found that in the majority of instances the entire cavity of the uterus could be reached by the finger, particularly if some pressure was exerted on the fundus. If instrumental interference was found necessary to completely empty the uterus, the placental

forceps were used in preference to the curette, as we considered it less liable to do any harm. The objection to the use of the curette is the danger of dislodging thrombi formed in the uterine sinuses and thus the danger of a further extention of the infection. Another objection to the curette is the danger of perforation of the puerperal uterus. When the use of a curette is deemed necessary, the largest one that can be easily introduced should be used. All instrumental intrauterine manipulation was avoided whenever possible, for we felt that it favored an extension of the infection and the formation of a pelvic exudate.

After the exploration of the uterine cavity, irrespective of whether retained tissue was present or not, no irrigation was done, no vaginal douches were given. and the uterine cavity was never packed with medicated gauze. At times the uterus was wiped out with sterile gauze. The irrigations were always looked upon as dangerous and the packing could do nothing but aid in the retention of any secretion present. With the cervix well dilated there is no indication for gauze or tube drainage. At times when there seemed to be any obstruction to the flow of the discharge, the head of the bed was raised and this seemed to overcome it.

In all cases, much attention was paid to the building up of the physiologic resistance of the patient. In 34 cases this was the only treatment employed and even in the cases where it was necessary to explore or pack the uterus, this line of treatment was begun at once. The object sought by this treatment was to give the patient, 1st. absolute rest in bed; 2d. a light nourishing diet; 3d. relief from pain; 4th. sleep; 5th, to stimulate elimination; 6th, to supply plenty of fresh air and sunshine.

In all the different treatments recommended for the care of puerperal infection, none has given such good results as that which tends to build up the physiologic resistance of the patient. All the cases in this series were placed on this line of treatment and if improvement was not noted, other means were resorted to. In only ten cases was the vaginal section necessary and the abdomen was opened but four times. All these cases were placed in as cheerful surroundings as possible. the room selected was one with plenty of fresh air and lots of sunshine. the diet consisted principally of milk, eggs and beef juice. For pain, codeine and morphine were given in sufficient amounts to control it; when there was no pain present the patient generally rested well.* Sleep is absolutely necessary in these cases, if for any reason a patient

*An ice bag is generally placed over the lower abdomen—at times it helps to relieve the pain and may have some local effect.

did not obtain natural sleep, drugs were resorted to. Fluids were relied upon to stimulate elimination. If two quarts were not taken daily by the mouth, normal salt solution was given per rectum in sufficient quantities to make up the amount. We found that giving the salines in quantities of 6 to 8 ounces at a time caused less irritation to the rectum than giving it by the drop method. The presence of the tube in the rectum often caused it to become irritated and the patient was unable to retain the salines. As we considered it absolutely necessary for the body to receive the liquids we chose the method which caused the least irritation.

When necessary, a daily enema was given to move the bowels.

In giving the outline of this treatment it will be noted that no mention was made of the use of stimulants, strychnine, whiskey, etc. It was our rule to use stimulants and all kinds of medication as sparingly as possible, our idea being to do nothing to lower the resistance of the patient in any way, but to do everything in our power to increase it. The use of vaccines was not employed in the treatment of any of these cases.

In this series, there were seven deaths, six due to a general suppurative peritonitis that the patient was suffering from on entering the hospital and one due to a general suppurative peritonitis following the opening of a pelvic abscess. All these cases were desperately ill on entering the hospital and they were considered hopeless from the first, two dying within 24 hours and four within a week.

The most frequent complication noted was pneumonia (5), other complications met were, ilio-psoas abscess (1), phlebitis (2), intestinal obstruction (1), acute nephritis (2), none of these complications were present in the fatal cases.

There were a number of points of interest in this series: 33 patients ran a temperature of 103° or above, 21 of these patients had a pelvic exudate, seven others were the fatal cases due to a general suppurative peritonitis and in the other five, one of the complications mentioned was present. Eighteen of the cases treated by supportive measures only, developed a pelvic exudate, but as soon as an immunity was produced, the exudate was gradually entirely absorbed, except in three cases where a slight thickening remained when patient left the hospital. The exudate was present in a majority of cases when the patient entered our service: whether it was due to previous intrauterine treatment was not often to be determined as many statements made by patients suffering from a miscarriage or an abortion are unreliable.

The uterus was explored for retained tissue in 19 cases and packed with gauze in 13 cases in order to stimulate contractions to empty the same and to get better dilatation of the cervix. Of the seven fatal cases, the uterus was explored in only one of them, there being no indication for any interference in the other six. The average length of time these patients remained in the hospital was 18½ days.

In looking over the available literature, I find that a great many of the writers on the subject of the treatment of puerperal infection still cling to the theory of uterine irrigations and the packing of the uterus with medicated gauze, even when it is known to be empty. I have already given my views in regard to that line of treatment. Some of the French writers advocate the intra-venous injection of bichloride of mercury, stating that "this is the best and most rapid method of combating the germs which cause the infection." This, however, is a method that I do not believe will ever be used much by the general practitioner, and is one of questionable value, as there is always some danger in introducing drugs in this manner.

The result of the experimental work with blood cultures, to determine the cause of the infection, has not proven satisfactory. Polak and Panzer of the American writers favor the conservative form of treatment as outlined in this paper.

In regard to the vaccine treatment, there is still a variety of opinions as to its efficiency. In a recent article by Williams, Cragin and Newell, they state in conclusion thus: "as the ordinary localized puerperal infection irrespective of the offending bacteria tends to a spontaneous cure, the field of vaccine therapy is practically limited to acute general infections where they unfortunately appear to be of little value and the most than can be said from the reports so far available is that their employment does no harm."

On the other hand, Cushing of Boston, reports good results which have been obtained by the use of autogenous vaccines. Where well equipped laboratories are at hand these autogeneous vaccines can be readily produced, however, more experimental work will have to be done before their value is assured.

Recent articles have been published by Vineberg and Seeligmann, of New York, on the successful operative treatment of thrombosed pelvic veins encountered in this class of cases. In our series, the question of operation for this condition never arose.

In conclusion, I will state that from the study of this subject we were convinced that each case is a law unto itself as regards its treatment, that all local treatment other than that called for by definite

symptoms is useless, and in the majority of cases harmful. That better results can be obtained by following out the conservative form of treatment, doing all in our power to build up the resistance of the patient, thereby helping the system to more quickly develop an immunity to the infection present,* as soon as an immunity is developed, the temperature and the leucocyte count rapidly returns to normal, and the exudate which is present in so many cases is quickly absorbed, thus allowing the patient to go on to a rapid complete recovery.

In the presence of a large pelvic exudate and a high fever—it may seem rather heroic treatment to depend on supportive measures alone—but in our series of 34 cases treated by these measures alone—18 of them developed a pelvic exudate varying from a slight thickening in one or the other of the broad ligaments to one filling the entire pelvis—and twenty in this series ran a temperture of 103°—yet all went forward to a complete recovery.

We have come to place a good deal of reliance on the general attitude of the patient—facial expression, etc.

All cases of puerperal infection should be sent to a hospital whenever possible—as there they can be under constant observation and if it becomes necessary to resort to any operative procedures we are in the proper surroundings and have the means at hand to do careful, thorough work.

---

## EUROPEAN CLINICS.

BY R. U. CAIRNS, M. D.,
RIVER FALLS.

I trust that there are among the readers of the Journal not a few who are planning courses of graduate study, and it is in hopes of answering a few of the questions these men would naturally ask that I have written the following on my impressions of European clinics.

Among European medical centers Vienna is by far the most popular with American physicians. There are at all times from one hundred to one hundred and fifty American physicians studying in the General Hospital (Allgemeines Krankenhaus) in Vienna. Among the things which have made Vienna popular as a place of medical study is the fact that the General Hospital in Vienna, being a national

*We feel that the systemic infections are more important than the local infections—and therefore the systemic treatment of more importance than any local treatment and the treatment used was for supporting and increasing the physiologic resistance.

institution, draws its patients from the entire Austro-Hungarian Empire, especially the rarer cases being sent in from the provincial towns. Thus there is brought together a richer collection of clinical material than in any other one institution the world over. Then the fixed habit of residence of Austrian people permits a system of case histories which would scarcely be possible with the shifting population of America. Moreover in most American hospitals, even in public institutions, there is a feeling that when a patient is pronounced incurable he must be sent home or somewhere else before he dies and increases the death rate of the hospital. In Vienna quite the reverse is true. When a patient is pronounced incurable, he is retained in the hospital, or if permitted to go home he must report from time to time and sooner or later he must come to the autopsy table. These autopsies with an accurate clinical history of every case often extending over months or even years has developed skill in clinical diagnosis not to be excelled anywhere. In fact, the reputation of a physician in the hospital depends very largely on how well his clinical diagnoses agree with the findings in the post-mortem room. Then the liberality of permitting the graduate students to perform the operations and other actual work in caring for patients is greater than in most clinics.

One thing which has done much to foster the residence of American physicians in Vienna has been the careful organization of the American Medical Association of Vienna. This association maintains comfortable club-rooms with a small but growing library. It issues annually a catalogue of courses known as the Association Blue Book. This catalogue is necessarily incomplete as new courses are arranged nearly every month and much special work can not be catalogued. Yet it gives a good idea of the work which is most popular among Americans and at the Association rooms is nearly always to be had full information as to what work is available in every department. This Association makes it possible for the student coming to Vienna to quickly find the exact work which he is looking for. Moreover he can find work in medicine and surgery and all the allied specialties in one hospital which is a great advantage to the general practitioner who wishes to divide his time among several lines of work.

Amphitheatre clinics given primarily for the undergraduates in the University in Vienna are open for a very small fee but are little frequented by Americans. In nearly every line of work courses are given to groups of from four to ten students, the courses consisting usually of clinical lectures, each student having the opportunity to examine the patients presented. With ten members in a group the usual fee is 50 Kronen ($10.) per student for twenty exercises.

Chances to do the actual work of examining and treating patients both in the wards and in out patient departments are numerous and for these places a man pays 100 Kronen a month or less according to the work. Special work is too numerous and fees too various to mention here.

A knowledge of the German language, although an advantage, is not absolutely necessary. In such specialties as eye, ear, nose and throat practically all courses are given in English. In internal medicine, pathology, gynecology and obstetrics much good work is given in English, while other very popular teachers give courses only in German. At present in surgery, pediatrics, dermatology and genito-urinary diseases very little work is given in English, but the tendency is every month to offer more courses in English. I believe that for any man who spends three months or more in Vienna, even if he takes all his courses in English, it is worth while to learn enough German to question patients.

In Berlin there are probably from thirty to fifty Americans studying medicine but it is difficult to estimate the number as they are scattered in a dozen hospitals and never all get together. There is in Berlin an Anglo-American Medical Association which issues a "Red Book" analagous to the "Blue Book" of the American Medical Association in Vienna and maintains a reading table and an information bureau in a book store, but the information which a new arrival in Berlin is able to obtain from the Association is very uncertain. If this association could be brought to a closer organization, and be prepared to give more definite information concerning work, it would not only be an immense advantage to the men already studying in Berlin, but certainly more Americans would stop there for study. There is in Berlin a large amount of good clinical work which is little used because of the difficulty in locating it. Owing to the small number of students in residence and the difficulty with which they get together there is little work given in courses except in the months of March and October when between terms the University faculty offer short courses for graduates.

The Americans studying in Berlin are mostly working as assistants in the hospital wards, the same man often working in two or more hospitals, which means much time on street cars and busses.

While Vienna excels in diagnosis, Berlin excels in treatment. Here is being done an immense amount of experimental work along the various lines of therapy, drug, vaccine, bath, electrical, mechanical, dietetic.

In London nearly all of the hospitals offer work for graduates

but it is scattered and unless a man knows in advance just whom he wants to study under, work is often hard to locate. London has developed the special hospital more than any other city and if a man is working only in one line he often finds work in one of these special hospitals to the best advantage. There are certain lines of work in London which are scarcely to be paralleled elsewhere; for example, the Tropical School of Medicine at Greenwich and the Wright Laboratory.

Paris offers a large amount of clinical work, but as the instruction is all in French, it is little used by Americans, except by our Canadian brothers. Nearly all of the European cities have clinics and many of the smaller cities contain men of pre-eminence in particular lines, but the man with only a few months to spend in study will not look for work outside of the cities named. In fact, he will do well to confine his work to one or at the most two cities as it takes time to get oriented in any city. Also for many courses a man must register in person, and sometimes must wait for a vacancy.

The oft repeated statement that a man can live more cheaply in Europe than in America is a fallacy. No doubt the average European student does live more cheaply than the average American student, but if one demands the same comforts which he would demand in an American city, on the average they will cost him a little more in Europe than in America. But the few extra dollars which a man spends for travel and living expenses are repaid many fold by the larger opportunities for study and the broader views of life.

## Notes.

Vienna. A letter enclosing 25c in U. S. postage, addressed to the American Medical Association of Vienna, 28 Schlosselgasse, Vienna, Austria, will bring a copy of the Association Blue Book, and reply to any questions concerning work.

Berlin. A letter enclosing 25c, addressed to the Anglo-American Medical Association, 105 Friedrich Strasse, Berlin, will bring a copy of the Association's Red Book, and if asked for, also a list of the University's vacation courses.

London. The Polyclinic Hospital, the Charing Cross Hospital, the London Hospital, the Middlesex Hospital, the St. Barnabas Hospital, and some of the other London hospitals will send catalogues on request.

## CLINICAL DEPARTMENT.

---

# RUPTURE OF UTERUS BEFORE TERM WITH CONTINUATION OF PREGNANCY.

### Report of a Case.

BY FREDERICK R. HYSLOP, M. D.,
WHITEWATER.

At the request of Dr. Dewire, our county secretary, I am sending you a report of a very unique and puzzling case that occurred in my obstetrical practice and which I reported at the last meeting of the Walworth County Medical Society.

One Sunday evening early last spring I was called to see a lady 42 years old, the mother of three children, the oldest 19, the youngest 11. I was informed by the husband that the waters had broken Saturday morning, that she was suffering with severe headache, and had been vomiting. Her bowels were very loose and she was extremely sore across the abdomen, but had no labor pains. Examination showed os partially dilated, head well down, but no amount of manipulation would cause any uterine contractions. Her pulse was rapid and weak, temperature not taken.

Not hearing from the patient during the night, I called about 8 A. M. Monday. Conditions were about the same with the exception that she had had no bowel movement since the evening before and her headache was better. The abdomen was tender but there were no labor pains. Called again at 4 P. M. dilated manually which proved to be easy as there were no contractions. After cervix was fully dilated and reflected back partially over the fetal head there were two fairly good pains and baby was born without the use of instruments. It proved to be a perfectly normal boy weighing 7½ pounds. After waiting a reasonable time I endeavored to remove the after-birth. After alternately working and waiting for over two hours I brought away all I could get which was about two-thirds. The patient's condition at this time was bad, temperature 102.6°, pulse very rapid and weak, abdomen very tense. In spite of all we could do patient grew rapidly worse, the abdomen becoming enormously distended and she died of general peritonitis Wednesday night. We opened the abdomen and found and removed the missing one-third of the placenta which was loose in abdominal cavity. The womb had not contracted, there was an opening in the fundus of over an inch and a half, somewhat elliptical in shape,

extending transversely across fundus. This was not a fresh tear, but on the contrary the edges were rounded off and covered with mucous membrane. There were no adhesions. The part of the placenta in the abdominal cavity was rounded off and showed no evidence of being attached except where torn loose from the rest.

The only history obtainable in this case was of a severe fall at about the fifth month of pregnancy. She stated she felt something give way at the time and went and lay down but did not call a physician, but never felt well afterward. My theory is that the uterus was ruptured at the time of the fall, part of the placenta being forced through into the abdominal cavity and as the circulation was not cut off it grew in this position. Why she did not die of hemorrhage at this time or have more alarming symptoms; why a peritonitis should develop after the escape of part of the amniotic fluid into the abdominal cavity; and why there was no hemorrhage above normal at the time of or after the confinement from the non-contraction of the womb, and how the boy could be so perfectly normal and healthy (living and doing well at the present time) are interesting questions.

I regret the inability of giving a more accurate scientific history of this case. The post mortem was performed very hastily as it occurred at a very busy time. I never saw the patient but once before I was called to confine her and that was at the second month of pregnancy. Her previous labors were extremely easy, the doctor never succeeding in getting there in time.

---

**Golden Rules of Pediatrics**, by JOHN ZAHORSKY, A. B., M. D., Clinical Professor of Pediatrics, Medical Department, Washington University, St. Louis, Medical Guide and Monograph Series, 254 pages, price $2.50. C. V. Mosby Co., St. Louis, Mo., 1911.

**Golden Rules of Diagnosis and Treatment of Diseases**, by HENRY A. CABLES, B. S., M. D., Professor of Medicine and Clinical Medicine of the College of Physicians and Surgeons, St. Louis, Medical Guide and Monograph Series, 278 pages, price $2.50. C. V. Mosby Co., St. Louis, Mo., 1911.

These volumes give a large amount of exceedingly practical and helpful information in the form of aphorisms and precepts. They might be described as tablet triturate text-books. The material composing the volumes is good, up-to-date, compact, and reliable. They are not intended for the specialist but are especially designed for the general practitioner.

---

MEETING OF THE STATE MEDICAL SOCIETY OF WISCONSIN AT WAUKESHA, JUNE, 1911.

# WISCONSIN MEDICAL JOURNAL

OFFICIAL PUBLICATION OF THE STATE MEDICAL SOCIETY OF WISCONSIN.

A. W. MYERS, M. D., Editor.
141 Wisconsin Street, Milwaukee.

J. P. McMAHON, M. D., Managing Editor.
141 Wisconsin Street.



Publication Committee:

A. J. Patek, M. D., Milwaukee. G. E. Seaman, M. D., Milwaukee
O. H. Foerster, M. D., Milwaukee. C. S. Sheldon, M. D., Madison.
S. S. Hall, M. D., Ripon.

Collaborators:

The Council.

M. R. Wilkinson.....Oconomowoc
G. Windesheim.....Kenosha
F. T. Nye.....Beloit
W. Cunningham.....Platteville
J. V. Mears.....Fond du Lac
H. W. Abraham.....Appleton
Edward Evans.....La Crosse
T. J. Redelings.....Marinette
O. T. Hougen.....Grand Rapids
R. U. Cairns.....River Falls
J. M. Dodd.....Ashland
H. E. Dearnolt.....Milwaukee



Annual Subscription. - - - $2.00. Single Copies, - - - - - $0.20

Address all business communications to
WISCONSIN MEDICAL JOURNAL,
504 Goldsmith Building, Milwaukee.

[Entered as second class matter, June 30th, 1903, at the Post Office at Milwaukee, Wis., under Act of Congress, March 3rd, 1879.]

Vol. X. JULY, 1911. No. 2


## EDITORIAL COMMENT.

### WHOSE FAULT IS IT?

In the article on "Relation of the Physician to the Public Campaign Against Tuberculosis" which is published in this issue of the Journal, Dr. Dearholt, the Secretary of the Wisconsin Anti-tuberculosis Association, has put the responsibility for the alleged mal-treatment of tuberculosis patients upon the central organization of the medical profession. It would seem to be difficult to get away from the facts and figures presented to show the remissness of the medical profession in the treatment and prevention of tuberculosis. We have most of us *felt* that some such condition existed and the figures and case histories cited in the article by Dr. Dearholt, printed elsewhere in this issue, would seem to *prove it*.

Dr. Cabot's testimony that the conditions set forth were not confined to Wisconsin, but were no less typical of the medical profession of Massachusetts, may have been a relief for the moment, but should not be allowed to furnish lasting balm.

The Anti-Tuberculosis Association deserves credit for not allowing itself to be lead into a muckraking exhibiton, so dear to the run of reform organizations. Rather has it come to us and courteously but firmly presented us with a problem, *our* problem, suggesting that *we* solve it.

Five years ago a tuberculosis commission of the State Medical Society was appointed. Nothing real, so far as we can find, has ever been accomplished by the commission, due, in all likelihood, to its failure to find anything to do in a field which was already being cultivated by a special and active society. Here is its opportunity for original investigation and an epoch making contribution, not alone to the profession of Wisconsin, but to that of the nation. We earnestly hope that no cause for delay will be encountered, but that by prompt action the profession may be rescued from a rather mean and discreditable position.

The question must be answered as to whether or not we shall assume the leadership, to which our knowledge and technical training would seem to qualify us, or be lead by those outside the medical profession, whose only claim to leadership may be earnestness and enthusiasm.

## MEDICAL DEFENSE.

If more were required to demonstrate the important part that Medical Defense—as an individual feature—is to play in the future of the State society, the report of the committee as presented to the House of Delegates, ought to dispel any lingering doubt in the minds of those who have thus far remained unconvinced.

When first presented to the society, in 1907, several county societies voiced their disapproval of this innovation; after its active introduction in 1908, fewer were found without the pale; and now there remains, we believe, but one county society that has refused to give its sanction. But the opposition, passive though it be, of even this one organization, ought to dissolve in the face of so convincng a report as the one presented to the State society at its recent meeting.

Since its organization, the Committee on Medical Defense has taken cognizance of or undertaken the defense of, suits or threats of suit, to the number of 24, brought against members of the society. These cases were fairly representative of that large class that forms the

bulk of those brought against physicians. Their varied character is indicated by the following citations of a few of those presented:

1. "Faulty Diagnosis." Action dropped.
2. Fracture. Dismissed by court.
3. "Faulty Diagnosis." Action dismissed.
4. Fracture. Dismissed by court.
5. Fracture. Dismissed by court.
6. Malpractice in gunshot injury. Judgment in favor of defendant physician.
7. Malpractice in treatment of infected leg. Judgment in favor of defendant doctor.
8. Damages for negligence in leaving packing in wound. Action dismissed.

In addition to the above, several cases are now pending; and, thanks to the activity of the committee's attorney, several threatened suits (among which were counterclaims to offset suits for payment of medical services), were not brought to trial. Many of the successful ones were won only after long legal battles, and it must be remembered that each such victory establishes a precedent, and makes the physicians' position a stronger one before the courts.

The above concrete facts speak for themselves. Medical defense is a perquisite of membership in the society that must rank as equal in importance with any other feature that makes membership attractive or even desirable. It is a valuable asset, one that must perforce increase in value as the cases multiply. Its further successes, to be gained only by a profession that is united in its resistance to unjust attacks, will prove the futility of suits based upon poor or sham foundations. And when the fear of expensive litigation no longer impels to ignoble compromise, the last stronghold of hold-up claimants and their unscrupulous attorneys will have vanished.

## THE CAUSE OF SCARLET FEVER.

The causative agent of scarlet fever has been "found" so often that the report of each new discovery is sure to meet with a certain amount of scepticism. It is bound to be detected in the course of time, however, and the report of Dr. A. E. Vipond of Montreal, entitled Scarlet Fever, Preliminary Note of its Specific Micro-organism, published in the Canadian Medical Association Journal for July, 1911, makes it appear very probable that the time has come. Dr. Vipond has isolated a bacillus from the enlarged lymphatic glands of seven cases of scarlet fever with which he was able to produce a disease

apparently identical with scarlet fever in monkeys and rabbits. In five of the seven cases examined a pure culture was obtained, two from inguinal nodes, one from axillary nodes, and two from anterior cervical nodes. The other two were post mortem cases, the first representing a severe type of the disease, the child dying from myocarditis, and here the culture showed staphylococcus aureus as well as the bacillus; the last was a rapidly fatal case of malignant scarlet fever where the rash was by no means typical and here the bacilli were comparatively few in number, while a vigorous growth of streptococci showed itself.

Dr. Vipond states that this bacillus will grow on all ordinary media, the growth occurring in three and one-half hours, an unusually short time. The bacilli are found in the lymph nodes where they appear to multiply and form toxins which enter the general circulation.

Typical scarlet fever, including rash, enlarged lymph nodes, and desquamation developed in all the monkeys and rabbits inoculated and one monkey and one rabbit were infected by direct contagion from monkeys and rabbits suffering from the experimentally produced disease. The same bacilli have been recovered from the lymph nodes of all of the infected animals whether the disease was produced by inoculation or contracted by direct contagion.

If these results are confirmed by other observers the importance of Dr. Vipond's discovery can hardly be overestimated.

## STATE SOCIETY PHOTOGRAPH.

On another page of this issue is a reproduction of one of the photographs taken at the meeting of the State Medical Society at Waukesha, in June. Look it over and see if you can find yourself and if you are not there make a solemn vow not to be missing at the next meeting at Wausau in 1912.

## LIST OF COUNTY SOCIETY OFFICERS.

On page 108 of this issue will be found a list of the County Medical Societies of Wisconsin together with the names of the president and secretary of each. It has been customary to publish this list in the number of the Journal containing the complete transactions of the annual meeting, but as this does not appear until November or December, and most of the elections take place in January, it has become out-of-date almost as soon as it is in print.

## NEWS ITEMS AND PERSONALS.

**Dr. C. J. Rhodes,** Beloit is said to be critically ill with ulcer of the stomach.

**Dr. T. F. Shinnick,** Watertown, has returned from an extended trip to the Pacific Coast.

**Dr. Aaron Jaffe** for the past two years interne at the Emergency Hospital has established himself in private practice in Milwaukee.

**Dr. G. A. Heidner.** West Bend, and Dr. Albert Driessel. St. Cloud. have associated themselves in the practice of medicine at West Bend.

**Dr. E. A. Miller,** who has been one of the Waupaca County Board of Pension Examiners, has tendered his resignation as a member of that body.

**Dr. J. F. Brown,** who has been at the head of the State Institute for the Blind at Janesville, succeeds Supt. Bright as head of the management of the Sparta School for Dependent Children.

**The Still Rock,** a new sanitarium for the treatment of kidney diseases. has recently been opened at Waukesha. Dr. A. J. Hodgson will be medical supervisor and Dr. F. Eakin. resident manager.

**The State Board of Medical Examiners** on July 13 elected Dr. Milton A. Barndt of Milwaukee. president, and Dr. John M. Beffel. Milwaukee. secretary-treasurer. Dr. Lucius T. Gould, Milwaukee, was appointed special examiner.

**Dr. F. W. Brownell,** New London, has disposed of his practice to Dr. J. W. Monsted and has gone to Three Lakes for the summer to enjoy a well earned vacation. When he resumes practice in September he expects to limit his practice to eye. ear, nose and throat work.

**Mt. Sinai Hospital, Milwaukee,** at a meeting on June 20. decided to try to raise $50.000 to meet the offer of Abraham Slimmer of Waverly. Iowa. for the erection of a new building. Mr. Slimmer a year ago offered $50.000 for a new building provided the directors raised a similar amount.

**Dr. E. N. Sartell,** Janesville, has filed papers with the clerk of the circuit court in a suit for $10.000 damages against the Janesville Traction Company. Dr. Sartell's hand was injured last February while boarding one of the Company's cars. He alleges that he is entitled to this amount not only to compensate his suffering. but also to reimburse him for his loss of practice resulting from the accident.

**Dr. V. H. Bassett,** formerly assistant superintendent of the Milwaukee County Hospital, now a resident of Savannah. Ga., and all of his family are in a hospital in that city suffering with typhoid fever due to a milk infection. Victor Bassett, the only son. aged 11 years. died on June 28th. but Dr. Bassett is now convalescent and the other members of the family seem to have a mild form of the disease.

**Removals.** Dr. H. J. Westgate, Ingram to Rhinelander.

Dr. W. O. McBride, Marinette to Oconto.

Dr. S. E. Wright, Marinette to Portland, Ore.

Dr. G. R. Godfrey, Lancaster to Omaha, Neb.

**Marriages.** Dr. A. J. Zuelke, Juneau, and Miss Josephine Carey, Fond du Lac, June 26th.

Dr. Emil Musil and Miss Ada Schilling, both of Racine, June 21.

Dr. P. H. Dernehl, Milwaukee, and Miss Edith Ziegler, Hayward, July 6th.

Dr. Robert Kitto, Racine, and Miss Marguerite M. Flood, Chicago, July 8th.

Dr. Francis J. Stirn, Cudahy, and Miss Clara Lochemes, Milwaukee, June 28th.

Dr. George M. McIntyre, Kenosha, and Mrs. Amelie L. Greene, Stevens Point, July 8th.

**Deaths.** Dr. P. A. Wakefield, West Salem, died on July 2nd as the result of overexertion during a fire.

Dr. Wakefield was born at Angelo, near Sparta, 36 years ago. He was educated at the La Crosse public and high schools and at Rush Medical College, where he was graduated in 1899. Immediately after graduation he removed to West Salem where he practiced his profession in partnership with Dr. S. R. Wakefield. Recently he had been practicing alone. He was a member of the La Crosse County and State Medical Societies.

Dr. Frank M. Brewer of Ft. Atkinson died on July 11th of heart disease. Dr. Brewer was born at Hebron, Jefferson County, June 22, 1863. His early life was spent in Hebron and vicinity. The family lived for a time at Chicago and Fairbury, Ill. At the age of 17 he became a student at the Northwestern University and Conservatory of Music at Evanston, Ill. He left the University in 1882 and in 1887 graduated from the Bennett Medical School at Chicago.

In May, 1900, he came to Jefferson and entered into partnership with his uncle, Dr. J. B. Brewer. In the fall of 1901 he removed to Ft. Atkinson where he has since resided.

Dr. W. H. Mosely, Madison, died on June 13, aged 70. He formerly resided at Sparta.

---

**Health Hints.** By E. R. Pritchard, 153 pages, cloth bound, price 50c. The Reilly & Britton Co., Publishers, Chicago.

The war-cry in the present crusade against disease, and particularly tuberculosis, may be summed up in the words: "Educate the public." Mr. Pritchard's little book certainly must be welcomed as a valuable addition in this effort to teach the public and the propaganda for the prevention of disease. Much of the success of teaching lies in the art of holding an audience. This we believe the author of "Health Hints" has well accomplished. In a clear, brief and interesting form, he discusses the problems of everyday hygiene, giving practical and valuable suggestions on the ars vivendi.

The book is of popular interest and ought to find a wide circle of readers.

G. C. R.

# THE STATE MEDICAL SOCIETY OF WISCONSIN.

ORGANIZED 1841

## Officers 1911-1912.

J. M. DODD, Ashland, President.

T. J. Redelings, Marinette, 1st Vice-President.

C. A. Armstrong, Boscobel, 2d Vice-President.

H. F. Dearholt, Milwaukee, 3rd Vice-President.

CHAS. S. SHELDON, Madison, Secretary.

S. S. HALL, Ripon, Treasurer.

ROCK SLEYSTER, Waupun, Assistant Secretary.

A. W. GRAY, Milwaukee, Chairman Program Committee.

G. E. SEAMAN, Milwaukee, Chairman Medical Defense Committee.

A. W. GRAY, Milwaukee, Chairman, Committee on Public Policy and Legislation.

## Delegates to American Medical Association.

J. T. Pember, Janesville. C. S. Sheldon, Madison. A. H. Levings, Milwaukee.

## Alternates.

W. T. Murphy, Waukesha. B. M. Caples, Waukesha. M. P. Ravenel, Madison.

## Councilors.

TERM EXPIRES 1917.

1st Dist., M. R. Wilkinson, - Oconomowoc
2nd Dist., G. Windesheim, - - Kenosha

TERM EXPIRES 1912.

3rd Dist., F. T. Nye, - - - - Beloit
4th Dist., W. Cunningham, - - Platteville

TERM EXPIRES 1913.

5th Dist., J. V. Mears, - - Fond du Lac
6th Dist., H. W. Abraham, - - Appleton

TERM EXPIRES 1914.

7th Dist., Edward Evans, - - La Crosse
8th Dist., T. J. Redelings, - - Marinette

TERM EXPIRES 1915.

9th Dist., O. T. Hougen, - - Grand Rapids
10th Dist., R. U. Cairns, - - River Falls

TERM EXPIRES 1916.

11th Dist., J. M. Dodd, - - - Ashland
12th Dist., H. E. Dearholt, - Milwaukee

## NEXT ANNUAL SESSION, WAUSAU, 1912.

The Wisconsin Medical Journal, Official Publication.

## LIST OF EXECUTIVE OFFICERS OF COUNTY MEDICAL SOCIETIES.

| County. | President. | Secretary. |
|---|---|---|
| Ashland-Bayfield-Iron | J. M. Meyers, Odanah | J. M. Dodd, Ashland. |
| Barron-Polk-Washburn-Sawyer-Burnett | H. B. Crommett, Amery | I. G. Babcock, Cumberland. |
| Brown-Kewaunee | R. C. Buchanan, Green Bay | T. J. Oliver, Green Bay. |
| Calumet | F. P. Knauf, Kiel | J. A. Schmidt, Brillion. |
| Chippewa | A. W. Wilmarth, Chippewa Falls | A. L. Beier, Chippewa Falls. |
| Clark | H. H. Christofferson, Colby | E. L. Bradbury, Neillsville. |
| Columbia | B. C. Meacher, Portage | A. J. Batty, Portage. |
| Crawford | A. E. Dillman, Steuben | A. J. McDowell, Soldiers Grove. |
| Dane | G. H. Keenan, Madison | T. W. Tormey, Madison. |
| Dodge | A. E. Bachhuber, Mayville | C. G. Schwalback, Juneau. |
| Door | | |
| Douglas | F. J. Johnson, Iron River | R. K. Lohmiller, Superior. |
| Dunn-Pepin | A. F. Heising, Menomonie | B. J. Steves, Menomonie. |
| Eau Claire | H. A. Fulton, Eau Claire | E. L. Mason, Eau Claire. |
| Fond du Lac | G. T. McDougall, Fond du Lac | F. A. Read, Fond du Lac. |
| Grant | C. R. Pickering, Muscoda | M. B. Glasier, Bloomington. |
| Green | L. A. Moore, Monroe | G. S. Darby, Brodhead. |
| Green Lake-Waushara-Adams | G. E. Baldwin, Green Lake | R. H. Buckland, Green Lake. |
| Iowa | W. S. Lincoln, Dodgeville | W. M. Gratiot, Mineral Point. |
| Jefferson | James Cox, Jefferson | C. R. Feld, Watertown. |
| Juneau | E. H. Townsend, New Lisbon | A. T. Gregory, Elroy. |
| Kenosha | W. M. Farr, Kenosha | J. H. Cleary, Kenosha. |
| La Crosse | C. H. Marquardt, La Crosse | M. W. Dvorak, La Crosse. |
| La Fayette | O. L. Hansen, Argyle | C. O. Latham, Darlington. |
| Langlade | M. J. Donohue, Antigo | J. C. Wright, Antigo. |
| Lincoln | C. C. Walsh, Merrill | Herbert Saylor, Merrill. |
| Manitowoc | J. R. Currens, Two Rivers | A. J. Shimek, Manitowoc. |

| County. | President. | Secretary. |
|---|---|---|
| Marathon | L. M. Willard, Wausau | Emile Roy, Wausau. |
| Marinette-Florence | H. F. Schroeder, Marinette | M. D. Bird, Marinette. |
| Milwaukee-Ozaukee | A. J. Patek, Milwaukee | Daniel Hopkinson, Milwaukee. |
| Monroe | C. H. Cremer, Cashton | A. R. Bell, Tomah. |
| Oconto | J. B. Atwood, Oconto | R. C. Faulds, Abrams. |
| Oneida-Forest-Vilas | J. M. Hogan, Oshkosh | C. A. Richards, Rhinelander. |
| Outagamie | V. F. Marshall, Appleton | J. P. Dohearty, Appleton. |
| Pierce | E. R. Halliday, Ellsworth | S. F. Rudolf, Ellsworth. |
| Portage | J. D. Lindores, Stevens Point | W. F. Cowan, Stevens Point. |
| Price-Taylor | C. E. Nystrum, Medford | G. H. McClure, Westboro. |
| Racine | E. A. Taylor, Racine | Susan Jones, Racine. |
| Richland | P. G. Lasche, Ithaca | A. D. Campbell, Richland Center. |
| Rock | G. W. Fifield, Janesville | E. B. Brown, Beloit. |
| Rusk | G. M. Carnahan, Bruce | W. F. O'Connor, Ladysmith. |
| Sauk | | Roger Cahoon, Baraboo. |
| Shawano | E. Puckner, Wittenberg | J. B. Gordon, Shawano. |
| Sheboygan | Edward Felter, Plymouth | W. F. Zierath, Sheboygan. |
| St. Croix | O. H. Epley, New Richmond | Boyd Williams, Hudson. |
| Trempealeau-Jackson-Buffalo | C. F. Peterson, Independence | H. A. Jegl, Galesville. |
| Vernon | John Schee, Westby | F. E. Morley, Viroqua. |
| Walworth | R. E. Rugh, Lake Geneva | M. V. Dewire, Sharon. |
| Washington | F. P. Leich, Jackson | S. J. Driessel, Barton. |
| Waukesha | J. H. Voge, Oconomowoc | R. E. Davies, Waukesha. |
| Waupaca | T. E. Loope, Iola | G. T. Dawley, New London. |
| Winnebago | B. C. Gudden, Oshkosh | W. L. Herner, Winnebago. |
| Wood | J. C. Hayward, Marshfield | J. B. Vedder, Marshfield. |

# SOCIETY PROCEEDINGS.

## BARRON-POLK-WASHBURN-SAWYER-BURNETT COUNTY MEDICAL SOCIETY.

The Barron-Polk-Washburn-Sawyer-Burnett County Medical Society held their regular quarterly meeting at Barron on June 6th. All the local physicians as well as the druggists were present, also Drs. Babcock and Hopkins of Cumberland and Dr. Christman of Almena. In the evening the doctors were banqueted at the Barron Hotel.

## CLARK COUNTY MEDICAL SOCIETY.

A meeting of the Clark County Medical Society held at Thorpe, June 28, 1911. Dr. H. H. Christofferson, the president, and Dr. E. L. Bradbury, the secretary, being absent, Dr. Jackey of Thorpe was appointed president pro tem, and Dr. H. R. Schofield of Greenwood was appointed secretary pro tem.

The applications of Dr. Frank Boeckmann of Greenwood, and Dr. P. M. Ross of Granton for membership were received and a motion to admit them was carried.

Paper: *Reminiscences from the life of an old practitioner, taken from real life,* by Dr. McCutcheon was read and thoroughly enjoyed by all. Discussion by Drs. McKittrick and Schofield.

Paper: *Suppurative Appendicitis,* by Dr. E. L. Mason of Eau Claire. Discussion by Dr. Jackey of Thorpe and Dr. Doege of Marshfield.

Paper: *Diagnosis of Scarlet Fever,* by Dr. Jackey of Thorpe. Discussion by Dr. Foley of Dorchester.

Paper: *Diagnosis of Diseases of the Chest,* by Dr. McKittrick of Eau Claire. Discussion by Dr. McCutcheon.

Motion made and carried, That a vote of thanks be extended Dr. McCutcheon for the very excellent program he furnished, and his genial hospitality.

The next meeting will be held in Greenwood the latter part of September, 1911.

H. R. SCHOFIELD, M. D., *Secretary Pro tem.*

## FOND DU LAC COUNTY MEDICAL SOCIETY.

The regular meeting of the Fond du Lac County Medical Society was held at the New Erving Hotel in Fond du Lac, Wednesday, July 12, 1911, at 7 P. M. After supper Dr. W. C. F. Witte, of Milwaukee, gave us a paper on *Recent Advances in the Treatment of Fractures*, illustrating the text with numerous X-ray pictures of fractures. Dr. Edwin Blaine exhibited the pictures and answered many questions in regard to his X-ray work. Dr. Witte exhibited his extension apparatus for putting on casts and answered the questions raised in the general discussion. Seventeen members were present.

F. A. READ, M. D., *Secretary.*

## MEDICAL SOCIETY OF MILWAUKEE COUNTY.

Meeting of April 14, 1911. Dr. C. A. Baer presented a paper entitled: *Wassermann Reaction with Report of Cases.* Discussed by Drs. Gillen, D. Hopkinson, H. M. Brown, and P. H. McGovern.

The following resolution introduced by Dr. J. J. McGovern was adopted: Resolved that the Committee on Public Policy and Legislation be instructed to investigate the activities of the Christian Scientists in order to ascertain to what extent they assume charge of cases sick with infectious diseases or any other diseases that are amenable to medical or surgical treatment and report their findings to the Society at the next regular meeting.

Motion was made by Dr. D. W. Harrington, duly seconded and carried, that the suggested amendments to the By-laws be rejected in toto.

The following motion introduced by Dr. C. A. Baer was duly seconded and carried:

*Whereas*, The newspapers are constantly publishing matter relating to medicine and medical men, and

*Whereas*, Many medical subjects are incorrectly presented in the newspapers and so tend to give laymen incorrect ideas on medical subjects, and

*Whereas*, Many medical matters of vital interest to the County and City of Milwaukee happen at times when it is difficult to secure a meeting of this society, and when the delay of a month until the following regular meeting would be prejudicial to such matters as need immediate explanation to the public,

I move, Mr. President, that a Press Committee of three members be appointed by the Chair to co-operate with the newspapers to the end that they supervise what appears in them, concerning the profession; that they give to the press, in correct form, such medical matters as should be made known to the public, and guard the layman by proper articles, appearing at proper times, against misconstruction and misinformation on medical discoveries, as well as on medical impositions.

That this Press Committee shall have discretionary powers; that it may originate communications for publication, and that to it may be referred matters for publication by the Society.

That this committee shall be privileged to refer such matters back to the Society for further action, if, in its opinion, such publication would be deemed unwise.

That all articles shall be signed "Press Committee of the Medical Society of Milwaukee County."

67 members present.

May 12, 1911.

The regular meeting was preceded by a dinner. Delegates and alternates were elected to represent the Society at the State Medical Meeting.

The following resolution presented by Dr. W. F. Becker was adopted:

*Whereas,* there is on foot a plan to establish an institution for the criminal insane in connection with the state prison at Waupun, and that legislation is now being sought to that end, and

*Whereas,* such a plan is pernicious and reactionary in failing to do justice to either class it would provide for namely: the insane criminals (convict insane) and the criminal insane, and

*Whereas,* it is opposed to the procedure of older states and the experience of several states has shown that it would be a regrettable mistake, therefore,

Be It Resolved, That the Medical Society of Milwaukee County is opposed to legislation establishing an insane hospital or institution in any connection with the state prison, and that a copy of these resolutions be presented at the hearing of the Committee having the bill in charge.

The following amended motion made by Dr. P. H. McGovern and amended by Dr. G. E. Seaman was duly seconded and carried: That the Committee on Public Policy and Legislation be instructed to confer with the State Board of Medical Examiners, to take such steps as are necessary to revoke the license to practice medicine of one Dr. F. X. Schaeffer.

Mr. Wilbur T. Phillips of New York addressed the Society on *Child Welfare.* Discussion by Drs. H. M. Brown and J. M. Beffel. The following resolution introduced by Dr. L. Hopkinson representing the Committee on Child Welfare, was adopted:

Resolved, That this Society heartily approves the Child Welfare Movement and will give its moral and personal support to the work.

Mr. W. M. Spooner addressed the Society on *Medical Defense.*

82 members present.

June 16, 1911.

Meeting called to order by the Vice-President, Dr. D. J. Hayes. Minutes of last meeting read and approved.

Dr. F. C. Gillen, representing Committee for the erection of a new isolation hospital, reported that the plans were not complete but would be presented at a later meeting.

The program consisted of the reporting of clinical cases by Drs. C. H. Echols, C. O. Thienhaus, W. H. Nielson, L. F. Jermain, P. F. Rogers, R. G. Sayle and L. Hopkinson; the reports were followed by free discussion.

30 members were present.

D. Hopkinson, M. D., *Secretary.*

## OUTAGAMIE COUNTY MEDICAL SOCIETY.

The Outagamie County Medical Society enjoyed their annual outing on Lake Winnebago on July 11th. A steamer was chartered for the occasion. The afternoon was spent in cruising on the lake and on their return the physicians stopped at Stroebe's Island where they partook of a fish fry.

## RACINE COUNTY MEDICAL SOCIETY

The Racine County Medical Society held their June meeting at the Antler's Hotel, at Brown's Lake, on June 29th. Dr. W. C. F. Witte of Milwaukee spoke on *Recent Advances on the Treatment of Fractures.* Dr. Blaine of Milwaukee showed some X-ray plates.

## SHAWANO COUNTY MEDICAL SOCIETY.

The June meeting of the Shawano County Medical Society was held at Wittenburg on June 22nd. The meeting was held in the Iroquois Club rooms. Papers were read and a general discussion followed.

## WAUPACA COUNTY MEDICAL SOCIETY.

The Annual Meeting of the Waupaca County Medical Society was convened at the Hotel Grand, New London, at 1 P. M., July 14th, President T. E. Loope presiding.

Minutes of the previous meeting were read and approved. Dr. O. N. Mortensen of Waupaca being duly qualified became affiliated with our society. Members in attendance: Drs. Pelton, Loope, Schneider, Jones, Christoffesen, Mortensen, Lee, Borchardt, Dawley, Kyes, Irvine, Johnson, Monsted, Jefferson, Brown. Visiting physicians: Mills of Appleton, Greiner and Rehling of Fremont.

The following papers were well received and thoroughly discussed by the society in general: *Retarded Resolution in Pneumonia*, L. H. Pelton of Waupaca; *Treatment of Pneumonia*, S. M. Kyes of Weyauwega; *Fractures of the Skull*, W. Irvine of Manawa; *Chorea*, J. W. Monsted of New London; *Doctors Organization and Association*, G. T. Dawley of New London.

After attending to miscellaneous business the society proceeded to the election of officers with the following results: President, Dr. T. E. Loope; Vice-President, Dr. A. C. Borchardt; Secretary and Treasurer, Dr. Geo. T. Dawley; Censors, Drs. Kyes and Johnson; Delegate, E. H. Jones; Alternate, J. H. Lee.

The September meeting is to be an evening session and held at Clintonville. All present voted this meeting a success and one of our best.

GEO. T. DAWLEY, M. D., *Secretary.*

## THE ASSOCIATION OF
## COUNTY SECRETARIES AND STATE OFFICERS
## OF THE STATE MEDICAL SOCIETY OF WISCONSIN.

W. F. ZIERATH, M. D., Sheboygan, President.

M. V. DEWIRE, M. D., Sharon, Vice-President.

ROCK SLEYSTER, M. D., Waupun, Secretary.

NEXT ANNUAL SESSION, WAUSAU, 1912.

**Under this heading will be published each month, papers, editorials, sermons, reports of meetings and all that relates to the County Medical Societies of the state. To it all are invited and asked to contribute, especially the County Secretary. It is yours—make good use of it, and may it be of help to every County Society. It will be edited by Rock Sleyster of Waupun, secretary of the new association, to whom all communications for this department, reports of meetings and news matter should be addressed.**

# HOW SHALL WE MAKE OUR MEETINGS MORE INTERESTING AND SUCCESSFUL.*

BY M. B. GLASIER, M. D.,
BLOOMINGTON, WIS.

To me has been assigned the subject "How Shall We Make Our Meetings More Interesting and Successful."

Had I been consulted in the selection of a topic this one I would have preferred not because of the information that I can impart to this assembly, but because the few thoughts that I express may bring out that which will be of mutual benefit in answering this question, which is one of the fundamental ones of our great fraternal organization, and upon which its success, in a large measure, depends.

How shall we make our meetings more interesting and successful?

First the value and advantages of organization, of association, of a united fraternity must be impressed upon the minds of members of the profession; the advantages of coming together to counsel for the good of our fraternity and for humanity; the free discussion of sub-

*Read at the first Annual Meeting of the Association of County Secretaries and State Officers, Milwaukee, 1910.

jects of mutual interest benefits all; personal greeting increases our interest in each other, and many of the petty jealousies and fancied wrongs are thereby righted, binding us more closely together, and helping us to abandon ruts, already worn too deep.

At a recent meeting of one of our county societies, two members, who had not been on speaking terms for five or six years, met. On this occasion there seemed to be a particularly harmonious, fraternal spirit existing, and one of the members mentioned approached the other, saying, "We have been bad friends, but for the life of me I don't know the cause of it." The other member gladly extended his hand, saying, "Never mind what it was. Let us forget it."

Examples are numerous that great projects of all kinds are carried to successful completion by the *combined* forces of those interested. The benefits of organization are taught us from the time of creation. It was said by the All Wise Creator that it was not good for man to live alone. So a helper, a councilor, was made for him. And thus the home, the highest type of organized society, was formed, and has existed from that time until now.

In this great work we should make all feel that each one occupies an important place, and has his own individual duties to perform; that although we can not all be rulers we can be helpers. The County Society, the greater State Society, and that greatest of all medical organizations, the American Medical Association, with its high standards and far reaching influence for benefiting mankind, have only been possible because of the strength and efforts of *individual* members.

The time and place for the meetings should receive due consideration. Other things being equal, those places most accessible are the ones to be chosen. There is a larger attendance and the consequent inspiration that comes from a "full house." But a most interesting and successful meeting *can* be held where even "two or three are gathered together" for earnest work and mutual benefit.

The time should be selected that is most convenient for the majority who wish to attend. Knowing that arrangements have been made for their personal convenience, members will feel it their duty to be present, and will make greater efforts to attend.

I wish to make a plea for frequent meetings, as being conducive to maintaining interest and promoting attendance,—the record of average attendance of those Societies having monthly meetings exceeding those held quarterly or less often.

The program should be so arranged that it will be attractive and

instructive, and many things are to be considered in this part of the work. That "Variety is the spice of life" is as true in Medical Society work as in other affairs of life. Papers and discussions, reports of interesting clinical cases, and when possible the exhibition of clinical cases, and not least of all, social features, all have an interest to the practitioner. The average busy physician does not think that he can give of his time to attend the meetings of his society, unless he gets value received for time given. But a program that has been carefully prepared by a competent committee, can hardly be otherwise than interesting and instructive, for it must of necessity deal with the subjects and questions that are of vital importance to all who attend—the best methods of preventing disease, and restoring to health those who are afflicted.

The social side of the program should receive more attention. We are so accustomed to see the physician in a serious mood, with thoughts intent on serving some suffering, complaining fellow being, ever ready to respond to the cry of the distressed, whether the call comes to him from his office, or the banquet hall; from his own cheerful fireside, or in the still small hours of the night, that we forget that his sense of enjoyment of a social nature, is just as keen as before he began the conflict with disease. A part of each meeting spent in social pleasure will awaken an interest that nothing else can give, and members will look eagerly forward to the meeting—will not need to be reminded of the time. The different social features of the County Society have been ably presented by one of our earnest co-workers, and who has given many suggestions which, if carried into effect, will result in benefit to our home Societies.

We should be wise in the selection of officers. Our brightest men, our most skillful surgeons, and our most successful practitioners are not always our *best officers*. We should strive to put those in authority over us who have the interest of the work at heart; who in their daily lives demonstrate their love for their fellow men and for the great Fraternity, to which they belong; who are willing to sacrifice their time, their wealth and their own feelings, if need be, that others may be benefited; who know neither clan nor favoritism; who bravely meet all responsibility and cheerfully bear all burdens incident to the office; who are not only willing to plan but to *do* whatever called upon to do, in order that the cause be advanced; remembering that trifles make perfection, but perfection is no trifle, and who will say as the old farmer said, when asked how he got so much work out of his hired help: "I always say, *come* boys, let us do this work; never *go* boys."

We should remember that some are born to rule and others to obey:

"Some mighty souls are destined to command:
Some throng the ranks, content—the Hand of Fate
Doth surely point to those who take their stand
In humble walk; who guide the Ship of State.
The quest is keen for leaders, who will serve
To guide aright humanity's advance;
Refined in heat of service, steady nerve,
Effacing creatures of rare circumstance."

Personal work on the part of officers is always rewarded. Words coming from the heart reach the heart, and if those in authority will forget self, and in the cheerful smile, the hearty handclasp and the warm words of welcome, make those in attendance feel that there *is* a bond of fraternal sympathy and brotherly love existing in our organization, our meeting together will be a delight, and the *success* of our meeting assured.

And in our quest for leaders, let us not forget those who have borne the heat and burden of the day, who are pioneers in the great work of medical organization, but seek to have them with us, and listen to their wise words of experience and counsel, and accord to them the honors due them.

And those who are new in the profession should be made to *feel* the welcome we would extend, and that upon *their* shoulders the burden and responsiblity will soon fall, as the present ranks are broken by time's onward march.

And if with good leaders "we walk side by side in the steps of our guide, and when narrows the road, *pull together,*" we will accomplish that for which we are striving, and in so doing *we* shall be helped, for we cannot try to benefit and elevate others without helping ourselves.

"If you give to the world the best you have,
The best will come back to you.
Give love, and love to your heart will flow,
A strength in your utmost need;
Have faith, and a score of hearts will show
Their faith in your word and deed.
For life is a mirror of king and slave,
'Tis just what you are and do;
Then give to the world the best you have,
And the best will come back to you."

Finally, if we truly have in our hearts the best interests of our great fraternity, and the good of our fellow men, and exemplify in our daily lives the virtues of charity, unselfishness and self-sacrifice, our reward will be evident in the increased interest in our meetings, and corresponding benefit to the community in which we live.

"We are not here to play, to dream, to drift;
We have hard work to do, and loads to lift.
Shun not the struggle: face it, 'tis God's gift."

---

## BOOK REVIEWS.

---

**1000 Surgical Suggestions.** By WALTER M. BRICKNER, B. S., M. D., Adjunct Surgeon Mount Sinai Hospital, Editor in Chief American Journal of Surgery, with the collaboration of James P. Warbasse, M. D., Harold Hays, M. D., Eli Moschcowitz, M. D., and Harold Neuhof, M. D. 225 pages. Cloth Bound Semi-de Luxe $1.00. Full de Luxe, Leather $2.25. Surgery Publishing Company, 92 William street, N. Y., U. S. A.

In its 225 pages are found a collection of 1000 epigrammatic and instructive hints based upon actual experience and everyone a lesson in itself.

The suggestions are so arranged and indexed that all subjects covered can be immediately referred to and the particular hint upon any particular subject immediately found. It bristles with pointed and useful suggestions which in many cases might just turn the scale from failure to success.

---

**Tuberculosis Directory.** From statistics published to-day in the new Tuberculosis Directory of the National Association for the Study and Prevention of Tuberculosis, it is ascertained that over 600 cities and towns of the United States, besides about 100 in Canada, are engaged in the war against consumption, and that on April 1st there were nearly 1500 different agencies at work in the crusade, an increase of nearly 700 per cent. in the last seven years.

The new Directory lists 421 tuberculosis sanatoria, hospitals, and day camps; 511 associations and committees for the prevention of tuberculosis; 342 special dispensaries; 68 open air schools; 98 hospitals for the insane and penal institutions making special provision for their tuberculosis inmates; besides giving an account of the anti-tuberculosis legislation in every state and in about 250 cities. The Directory, which is the third of its kind that has ever been published in this country, gives the most complete survey of the anti-tuberculosis movement that can be secured, and shows the remarkable growth of this campaign in the last seven years. The first Directory in 1904 showed only 183 organizations and institutions in the entire United States. The second Directory in 1908 reported 649 different agencies, as compared with

1440 in the new book. Taking these figures as a basis, the anti-tuberculosis movement has increased in force since 1904, nearly 700 per cent., and since 1908, over 105 per cent.

The following table shows the growth of the movement along the principal lines of activity for each year since 1905.

| Year | Associations | Sanatoria and Hospitals | Dispensaries | Open Air Schools |
|---|---|---|---|---|
| Established before 1905 | 18 | 111 | 18 | ... |
| Established during 1905 | 15 | 18 | 6 | ... |
| Established during 1906 | 18 | 16 | 14 | ... |
| Established during 1907 | 46 | 30 | 45 | 1 |
| Established during 1908 | 109 | 45 | 118 | 2 |
| Established during 1909 | 167 | 67 | 59 | 10 |
| Established during 1910 | 117 | 68 | 62 | 16 |
| Established during 1911 (April 1) | 21 | 66 | 20 | 39 |
| Total | 511 | 421 | 342 | 68 |

The new Directory is sold by the National Association for the Study and Prevention of Tuberculosis. 105 East 22d street, New York City, at cost price, 50 cents postpaid.

---

**Plaster of Paris and How to Use It.** By Martin W. Ware, M. D., N. Y., Adjunct Attending Surgeon, Mount Sinai Hospital; Surgeon to the Good Samaritan Dispensary; Instructor of Surgery in the New York Post Graduate School. Second edition revised and enlarged. Price, cloth, square form, $1.25. De Luxe, leather, $2.50. Surgery Publishing Co., New York.

The exhaustion of the first edition and the persistent demand for this helpful book were the incentives for this second edition, which has been completely rewritten and enlarged and thus its scope of usefulness has been greatly extended. Complete new drawings and marginal side notes in red embellish the book and ninety illustrations are used to more clearly put up to the eye of the reader the intent of its subject matter.

Such information as History, Materials, Manufacture of Bandages, Storage, Bandages of Commerce, Calot Plaster Bandages, The Immediate Preparation of Bandages, Application and Precaution, Removal of Bandages, etc., are all given under the contents of the Plaster of Paris Bandages. Then follows such chapters as Application of the Plaster of Paris Bandage to Individual Fracture, Fractures of the Upper Extremity, Fractures of the Lower Extremity, Moulded Plaster of Paris splints, Plaster of Paris in Orthopedic Surgery, etc., and all presented in such a comprehensive manner as to make this book of particular service to every doctor.

---

**Practical Medicine Series.** Vol. I. series 1911, General Medicine, edited by Frank Billings, M. S., M. D., and J. H. Salisbury, A. M., M. D., Chicago. Pp. 394. Price, $1.50. Vol. II. General Surgery, edited by John B. Murphy, A. M. M. D., LL. D., Chicago. Pp. 587. Price $2.00. Vol. III. Eye,

Ear, Nose, Throat, edited by CASEY A. WOOD, C. M., M. D., D. C. L.; ALBERT H. ANDREWS, M. D., and GUSTAVUS P. HEAD, M. D., Chicago. Pp. 352. Price, $1.50. Price of the series of ten volumes $10.00. The Year Book Publishers, 40 Dearborn Street, Chicago.

These volumes of a handy size and attractively arranged for the student and busy practitioner, are replete with suggestions of the best practice of the day. The material of the volumes consists almost entirely of abstracts of important recent articles, in each case giving the reference to the original article. The ground is covered with great thoroughness, so that these books present in condensed form what has been done during the year that is really good.

By means of this excellent series of books it is possible for the general practitioner to keep in touch with medical progress in all its directions, an undertaking which the growth of medical literature has rendered an impossibility without such an aid. The judicious editorship of the entire series and of the individual volumes eliminates most of the superficial and unsound in current medical literature and presents the articles of real value in a form full enough for satisfactory use.

For the busy general practitioner, who desires to keep moving with the current of progress this series will prove most helpful.

---

**Litora Aliena,** from the Boston Medical and Surgical Journal. Octavo, 78 pp. Price, 50 cents. W. M. Leonard, Publisher, Boston, Mass.

This series of letters, sent to the Boston Medical and Surgical Journal by one of its editors during a recent European trip, furnishes a delightful addition to the lighter side of medical literature; a field not the less important because so rarely cultivated. The author's journey through Ireland, England, Holland, Belgium, Germany and back to England again was undertaken for pleasure not for study, but as he travels he sees the world through the eyes of a medical man and the pleasantly written narrative of his excursions will afford the reader a most enjoyable evening. Those of us who have had the misfortune to be sea-sick may not agree with his views of the pathology of this ailment but we can all unite in enjoying his letters on "Obstetrics in Ireland." "London and its Hospitals." "From Bavaria to Berlin," "The Land of Arthurian Romance," and the kindred subjects which have occupied his pen.

---

**A Manual of Obstetrics.** By A. F. A. KING, M. D., Professor of Obstetrics and Diseases of Women in the Medical Department of the George Washington University, Washington, D. C., and in the Medical Department of the University of Vermont, etc. Eleventh edition, enlarged and thoroughly revised, 12mo., 713 pages, with 341 illustrations and three colored plates. Cloth, $2.75, net. Lea & Febiger, Philadelphia and New York, 1910.

The rapid passage of Professor King's Manual of Obstetrics to an eleventh edition, stamps the volume as possessing in high degree the essentials required in a work of this kind.

The original aim of the author has in this revision been judiciously maintained. Brevity and lucidity of statement mark its pages without sacrifice of completeness, and as a text-book for the elementary student or work of reference for the overbusy practitioner, it will continue to enjoy its well merited reputation.

Among the more important additions may be mentioned the subjects of pubiotomy, spontaneous version by posture and the factor of thigh-pressure upon the abdomen considered as one of the auxiliary forces of labor. The section on hyperemesis has been rewritten and the illustrations have been increased by the addition of thirty-seven new figures.

There is a clearness and definiteness about Professor King's teachings which gives an especial value to his work for the student or general practitioner. Added to this is the remarkably effective illustration of the volume. There are many obstetric procedures which may be made simple and clear at a glance by a well chosen illustration when their verbal description alone might make them appear difficult or complicated. By the elimination of unnecessary plates and the very free use of well selected illustrations the happy combination of clearness, completeness and brevity has been achieved in a volume of moderate size and low price.

---

**Gynecological Diagnosis.** By WALTER L. BURRAGE, M. D., Fellow of the American Gynecological Society. Cloth. Price. $6.00. Pp. 656, with 207 illustrations. New York. D. Appleton & Co., 1910.

This is one of the newer books dealing entirely with the diagnostic side of gynecology. The text is divided into two parts.

Part I deals with general considerations. Much of the material contained in this section is given in the introductory chapters of general gynecology. In speaking of instruments and their use in diagnosis the author well remarks that they are not the most important part of the physician's equipment.

The chapter on cysto-scopy takes up very thoroughly the Kelly method. The Kelly scope is used almost exclusively and little or no mention is made of the costly tungsten lighted instruments. Dr. Burrage undoubtedly thinks that just as good work can be done with the simpler instruments. The first section closes with chapters on the rectum, the significance of the chief symptom of pelvic diseases, dysmenorrhea, meno-and metrorrhagia, amenorrhea, sterility, etc. The latter two-thirds of the volume are devoted to special diagnosis.

The chapters are for the most part well written and very complete. The differential diagnosis of extra-uterine pregnancy and the importance of an early diagnosis are well emphasized.

The author adopts the pathological classification of ovarian tumors as given by Pfannenstiel. The chapter on diagnosis of diseases of the bladder is rather meagre, considering the important position that bladder diseases have in gynecology. The text is illustrated by two hundred and fifteen drawings.

Dr. Burrage's work has been criticized for its lack of gynecological pathology, but in the preface the author draws particular attention to the fact that purposely he has omitted much in this line, and has given more

attention to the diagnosis without the aid of a trained pathologist and bacteriologist.

For the general practitioner it is a very practical book from the purely clinical side of gynecology. G. A. C.

---

**Case Histories in Pediatrics.** By JOHN LOVETT MORSE, A. M., M. D., Assistant Professor of Pediatrics, Harvard Medical School, Octavo, 320 pp. Illustrated, price $3.00. W. M. Leonard, Publisher, Boston, Mass. "Case teaching," which had been in use for a number of years in the Harvard Law School, was introduced into the Harvard Medical School in 1900 and the method has been found so useful in the instruction of graduate students as well as of undergraduates that, as Dr. Morse states in his preface, "he felt that there was need for the utilization of this method for the presentation of the subject of pediatrics to the practitioner."

The Author has selected one hundred actual Case Histories, classified them under section headings, "Diseases of Nutrition," etc., and considered each case under the captions History, Physical Examination, Diagnosis, Prognosis and Treatment exactly as he has done before his post graduate classes. The result is a book of real value which presents an unusually complete post graduate clinical course in the diseases of children.

Dr. Morse has the faculty of presenting these case histories with a vividness which makes the reading of his work a pleasure and this method of presenting the subject certainly has a stimulating effect upon the reader which the ordinary text book sadly lacks.

A very complete index makes the book valuable for systematic reference.

---

**Modern Treatment; The Management of Disease with Medicinal and Non-Medicinal Remedies.** By Eminent American and English Authorities. Edited by HOBART AMORY HARE, M. D., Professor of Therapeutics and Materia Medica, Jefferson Medical College, Philadelphia; Physician to the Jefferson Hospital; Author of "A Text-Book of Practical Therapeutics," "A Text-book of the Practice of Medicine," etc. In two very handsome octavo volumes, comprising 1800 pages, with numerous engravings and full-page plates. Price per volume in cloth, $6.00, net; half morocco, $7.50, net. Lea & Febiger, Publishers, Philadelphia and New York, 1910.

This large two volume work fills the want created in the profession at frequent intervals for books embodying the newer therapeutic ideas together with those of established excellence.

Vol. I. consists of chapters on the general considerations of pharmacology and prescription writing, the treatment of disease by non-medicinal measures, among which are included serums, vaccines, tuberculin and glandular therapy and chapters on the treatment of the infectious diseases.

Vol. II. is divided into ten "parts" each containing chapters on the remaining diseases according to their various classifications. A careful search fails to find omissions of any of the more important new contributions to therapeutic knowledge and the distinction of the various writers entitle their

selections of remedies to the consideration of physicians anxious for the best results in the treatment of their patients.

It strikes one as a curious fact that the entire list of contributors contains not a single name from the faculty or graduates of one of the medical schools best known in the United States for research work and scientific accuracy in diagnostic and pathologic lines. Does this observation indicate that distinguished therapeutics come only from other schools, or may it be explained as a coincidence?

Among the more important portions of the book are the chapters on the treatment of infectious diseases particularly in the exact description of the indications and technique of the employment of the various sera and vaccines, the prophylactic typhoid inoculation, and the methods in use for the administration of the antimeningitis serum.

A perusal of the work will show what strides have been made in recent years in the reduction of the incidence and mortality of meningitis by the Flexner serum, tuberculosis by the sanatorium method, cholera by hypertonic saline injections, typhoid fever by prophylactic injections, and syphilis, plague, and hook worm disease by their well known curative agents.

We have no hesitation in commending this work, not only as a most valuable and reliable work of reference on the latest accepted therapeutic teachings but also as a most interesting and readable presentation of the writings on the more recent therapeutic researches.

C. H. S.

---

**Hookworm Disease**—Etiology, Pathology, Diagnosis, Prognosis, Prophylaxis, and Treatment. By George Dock, A. M., M. D., Professor of the Theory and Practice of Medicine, Medical Department Tulane University of Louisiana, New Orleans, and Charles C. Bass, M. D., Instructor of Clinical Microscopy and Clinical Medicine, Medical Department Tulane University of Louisiana, New Orleans. 250 pages, royal octavo. Fifty illustrations, including one colored plate. Price, $2.50. C. V. Mosby Company, St. Louis, Publishers.

This book is dedicated to Charles Wardell Stiles "whose brilliant conceptions and untiring labors have enlarged our knowledge of hookworm disease, and thereby opened up one of the most important fields of preventive medicine."

As remarked in the preface, "no more striking example of the transitory state of medical knowledge can be advanced than the proof brought within the last few years, not only that hookworms exist as human parasites in a large part of the country, but that they may with reason be looked upon as among the most important causes of diseases of the South in extent, in destruction of life, and in leading to physical and mental degeneration."

This book is extremely interesting and should be read by every medical man.

The chapters dealing with the distribution, modes of infection, and prophylaxis are especially interesting. The wide spread distribution and the large number of people of the South affected will be a surprise to most physicians who have not, as yet, been especially interested in the subject.

The relation of ground itch to the disease is well elaborated and the source of infection clearly shown. The hygienic condition of the people living in southern rural districts, especially their method of disposing of their feces, is a revelation to most northern physicians.

The book is very well written and in arrangement and compactness is a model of medical literature. R. C. B.

---

**New and Nonofficial Remedies, 1911:** Containing descriptions of articles which have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association, prior to January 1, 1911. Price, paper, 25 cents; Cloth 50 cents. Pp. 282.

This is the 1911 edition of the annual New and Nonofficial Remedies, issued by the Council on Pharmacy and Chemistry of the American Medical Association, and contains descriptions of all articles approved by the Council, up to December 31, 1910. There are also descriptions of a number of unofficial non-proprietary articles which the Council deemed of value. The action, dosage, uses and tests of identity, purity and strength of articles are given.

Besides indicating to physicians the proprietary articles which the Council's examination has found to honestly marketed, and containing accurate descriptions of these articles, all similar articles are arranged under group headings; thus the physician at a glance can learn that atoxyl and soamin are practically identical articles, and that arsacetin is a closely related body. Again, the several proprietary solutions of the blood-pressure-raising principle of the suprarenal gland are listed under a general title "epinephrin," and the manner in which the solutions differ from each other can be learned at a glance. In the same way, the medicinal foods are brought together and their relative value compared.

---

**Inebriety, A Clinical Treatise and Study.** By T. D. Crothers, M. D., Harvey Publishing Co., Cincinnati, O., 1911. $3.00

Inebriety as a disease was recognized 5000 years before the Christian era. Egyptian research reveals this in disclosing a civilization which for strenuousness and the consumption of beer and wine was remarkably like our own. For instance there was a town in Egypt called Quede which had the reputation for producing the finest beer in the country—an ancient "Milwaukee."

From that remote day to the present the theory of inebriety has been insistently fighting its way with more or less success. Sometimes it has attained large recognition, as in Rome when laws were passed relieving from responsibility homicides that were committed during intoxication.

The first inebriate asylum was opened at Binghampton, N. Y., in 1864, the first international congress of inebriety was held in 1887 and since that time the dictum that drunkenness is a physical rather than a moral disorder has had a wider and more effective propaganda in scientific circles and a more general recognition among the laity. Thus is seems an unavoidable conclusion that the degree of mental irresponsibility from alcohol is no more or no less than that in mental disturbance from any other toxic agent at the

bottom of a psychosis. Etiologically too the large factor that alcohol plays in the psychoses (30 per cent.) has been driven home. These things coupled with the tissue changes from alcohol on the nervous system, not only justify but prevent any other conception that that of a physical basis for disorders into which alcohol enters.

All of these matters Dr. Crothers has set forth comprehensively in his work on "Inebriety, A Clinical Treatise on the Etiolcgy, Symptomatology, Neurosis, Psychosis and Treatment and the Medico Legal Relation" published by Harvey Publishing Co., Cincinnati.

Dr. Crothers himself was one of the pioneers in the field of inebriety and its treatment as a disease and no one is better qualified to speak on its various relations than he, from long association with his subject as a writer, clinician and specialist in treatment at his institution at Hartford, Conn.—W. F. B.

---

**Systemic (Including Special) Pathology.** by J. George Adami, M. A., M. D., LL. D., F. R. S.., Professor of Pathology, and Albert G. Nicholls, M. A., M. D., F. R. S., Assistant Professor of Pathology in McGill University, Montreal. In one octavo volume of 1160 pages, with 301 engravings and 15 plates. Cloth, $6.00, net Lea & Febiger, Philadelphia and New York, 1911.

While this volume cannot be said to be the equal of volume I on General Pathology, yet it succeeds better than most pathologies in avoiding the tendency to treat special pathology by page after page of definitions, with here and there a gross anatomical or a histological description. The subject has been vitalized by the injection of discussions of etiology and pathogenesis and of functional disturbances added to the routine descriptions. By this treatment the subject has been rounded into form in which it should be most attractive to the student, and which should further afford him an easy transition from the fundamental medical sciences to the practice of medicine.

The condensation of the subject of systemic pathology into even so large a single volume as this has resulted in a curtailed treatment of many subjects of interest to pathologists, yet the subjects of importance have received generous attention.

In the revision from the first edition many of the omissions have been remedied, several chapters rewritten among them those on Ductless Glands and on the Nervous System, and material points added generally which constitute a decided improvement.—C. H. B.

---

# THE WISCONSIN MEDICAL JOURNAL

AUGUST, 1911.

## ORIGINAL ARTICLES.

### ILEOCECAL "ADHESIONS."*

("LANE'S KINK" AND "JACKSON'S MEMBRANE,")

BY F. GREGORY CONNELL, M. D.,

OSHKOSH, WIS.

Appendectomy for chronic recurrent appendicitis or for symptoms attributed to such a condition is often followed by unsatisfactory results; the explanation obviously lies with a mistaken diagnosis, or some overlooked complication, both of which, as is well known, may occur with great frequency in cases so diagnosed.

The ileal kink described by Lane (1), and the membranous pericolitis of Jackson (2), are perhaps the most recently described complications. These conditions may, of course, occur either with or without an appendicitis.

Mr. W. Arbuthnot Lane (3), in his classic studies of chronic intestinal stasis has called our attention to many acquired connective tissue bands that result in pathologic flexures in the intestinal tract, but the one referred to by the term "Lane Kink" is found in the terminal ileum, usually within the last four inches and may assume various shapes, either an inverted or an upright "V," with the two limbs of the angle more or less intimately attached to each other.

Another type is a less acute angulation with the concavity of the curve toward the head, in which there is also a rotation of the bowel upon its long axis.

The membranous pericolitis will be best described by quoting from Hall in Jackson's article (2),—"From a point just at the hepatic flexure to three inches above the caput there spreads from the

*Read at the 65th Annual Meeting of the State Medical Society of Wisconsin, Waukesha, June 8, 1911.

parietal margin over the external lateral margin to the internal longitudinal muscle band a thin vascular veil in which long straight, unbranching blood-vessels course, most of which are parallel with each other and take a slightly spiral direction over the colon from the outer upper peritoneal attachment to the inner lower portion of the gut ending just above the caput. The appendix is not implicated in any way.

"Coursing with the blood-vessels are numbers of shining narrow bands of connective tissue which gradually broaden as they go and end in a slight fan shaped attachment at various points on the anterior and inner surfaces of the colon. At these points of attachment, the gut is held in rigid plication.

"The entire specimen conveys to the eye the idea that an edematous fluid lies beneath this delicate membrane and reminds one of nothing so much as an edematous arachnoid so often encountered on removing the dura mater from the brain of a dead alcoholic. The colon seems placed in a diaphanous bag slightly too short to contain it without wrinkling. At the beginning of the hepatic flexure the drawn membrane particularly angulates the contained colon. Here and there are spots and tags of fat beneath the cobweb. On handling the specimen the colon slips about in its bag without entire freedom as a fetus within its amniotic sac. A portion of the parietal peritoneum has been removed with the colon and shows that the membrane and blood-vessels arise in and are continuous with the structures of the parietal peritoneum, as it sweeps over the colon. The entire structure seems to be peritoneum, loosened from its close connection to the abdominal wall and colonic surface by some serous exudate after which the particular vascularization and connective tissue banding has occurred as a chronic reaction to irritative influence."

Hofmeister (4), describes veil-like adhesions, varying in density, that could be lifted up with forceps, and only after division of this delicate membrane did the true serous covering of the gut become exposed. Their consistency varies from that of a fine veil-like substance, to firm strands of scar tissue. The constricting action of such bands could not be fully appreciated until one saw how the intestinal wall unfolded to its normal shape after their division.

Enlargement of the mesenteric lymph glands is mentioned by Hofmeister; in three of the writers cases these were notably enlarged, but miscroscopic examination showed this to be due to chronic inflammatory hyperplasia.

This membrane has been previously observed and mentioned in literature, but Jackson was the first to describe it in detail, and to

emphasize its importance as a pathological and clinical entity. Lane evidently deals with the same connection, but does not describe the characteristic membrane, speaking merely of "adhesions" which may be found in various locations, the ileocecal region, ascending colon, hepatic or splenic flexure or the sigmoid, though he does not consider these to be the result of inflammation, as is the usual adhesion.

In Jackson's case, he was able to find this membrane only in the region of the cecum and the ascending colon, while Hofmeister corroborates the finding of Lane.

Binnie (5), as early as 1905, under the title "Pericolitis Dextra" mentions this "delicate curtain or web of adhesions covering the cecum." Hofmeister gives credit to Virchow for first calling attention to this condition.

*Etiology.*—That the ileal kink is caused by the descent of the cecum is generally admitted. F. H. Martin (6), reminds us that the lower ileum is comparatively fixed and that there are two factors leading to its distortion; a too movable or misplaced large bowel; or an abnormal disposition of the remaining small bowel or other viscera; concluding that it is safe to assume that the kink will not occur if large and small bowel are normal. Martin well points out the importance of the long continued traumatism of the comparatively fixed portion of the ileum by the overriding of the intestine and superimposed viscera. The descent of the cecum, he explains, as due to developmental failure of fusion between parietal and visceral peritoneum, resulting in general visceral enteroptosis, improper muscular development of the abdominal wall, persistence of a straight spine, and non-rotation of the pelvis to a position of right angle to the perpendicular of the spine.

Mr. Lane considers the ileal kink to be due to ptosis of the cecum, which in turn, he attributes largely to the erect position of the trunk. He explains that this tendency of the cecum to fall is met by crystalization of lines of strain into peritoneal adhesions, which form bands external to the cecum and ascending colon and fix these structures to the abdominal wall; frequently involving and distorting the appendix. The internal strain comes upon the termination of the ileum, and the posterior layer of its mesentery. In the latter region, a layer of peritoneum is formed that kinks the ileum in two planes, one being vertical and angular, the other being due to torsion. The combined torsion and angulation making a very effectual obstruction. The end of the ileum with the additional thickening and contraction of the posterior layer of the mesentery form an *internal,* or median, ligament which tends to keep the cecum out of the pelvis.

The external, or lateral, ligament consists of the acquired plane of peritoneum which extends inward from the abdominal wall to the cecum, and ascending colon, with also the proximal portion of the appendix in some cases. The external acquired ligament of Lane, is in many respects very similar to the membranous pericolitis of Jackson.

An essential cause of the membranous pericolitis is not generally accepted. Jackson frankly admits ignorance as to whether the ptosis antecedes and is followed by this condition, or whether the ptosis is a result.

Mayo (7), believes this membrane to be "due to the late rotation of the bowel and descent of the cecum from its hepatic position, after the formation of the parietal portion of the peritoneal cavity in the infant. The cecum burrows its way into position, as it were, through the peritoneum."

Such an explanation attributes to the cecum in its descent from the liver the rather unusual choice of the route of the greatest, instead of the least, resistance, and prompts the question,—Why burrow behind an already formed posterior parietal peritoneum, when it would be much easier to descend in front of this structure in the usual manner?

After the removal of this adventitious membrane the cecum and the colon usually have a mesentery, and can be brought well up into the abdominal wound. Were the explanation of Mayo correct the caput cecum and the appendix would be enveloped by the veil, as this would be the entering wedge to force itself behind the peritoneum. But, as a matter of fact, the appendix and the lower part of the cecum are often not within the membrane, its lower margin being above the lowest point of the cecum.

Binnie considers it a primary pericolitis, the appendix, if involved, being secondary, and quotes Alglave, who attributes the entire change to nephroptosis.

Morris (8), in speaking of "Gall Spider Cases," quotes the late Byron Robinson to the effect that adhesions were found in the bile tract region more frequently than elsewhere in the peritoneal cavity, excepting the pelvis in women; and that the cecal region stood third in order of abundance of adhesions.

Hertzler (9), has described a similar condition but considers it to be of inflammatory origin, either in the appendix or gall bladder.

Hofmeister, likewise considers the cause to be an inflammation of neighboring organs, such as the bile passages, the stomach, or the duodenum. He makes the report that in ten of his last 14 cases the *trichocephalus dispar* was found. This is most interesting because of

the fact that Metchnikoff and Guirat (10), have both suggested that the escape of intestinal bacteria along the fine passages made by this parasite is a probable cause of some cases of peritonitis and appendicitis.

Lenander believes that adhesions are chiefly the result of infantile colitis. Chronic colitis is looked upon as a cause by many, and Fischler states that such an inflammation of the colon leads to muscular atony.

That the conditions under discussion are not inflammatory would seem to be indicated by their very definite localization. If due to appendicitis, the appendix should be constantly involved; if due to colitis, the median aspect of the colon should be equally involved.

Lane, Jackson, and Martin, all agree that these changes are not adhesions in the usual acceptance of the term. Lane goes so far as to say: "Nothing appears so absurd as the attempts of surgeons to make out that the inflammation of the appendix is a primary condition and that it is productive of the other effects of intestinal stasis."

*Frequency.*—A definite statement as to the frequency of these conditions can not be made as the subject is comparatively new, Jackson met with nine cases of pericolitis in one year. In 1909, I encountered four cases of the pericolic membrane, three in my own practice and was a spectator at an operation by Dr. B. C. Gudden, of this city, where laparotomy was performed for chronic recurrent appendicitis, at which there was found a very distinct and definite pericolitis; this membrane was divided and the ileo-cecal junction brought up, out of the abdomen, but despite a most pains-taking and thorough search, the appendix could not be found.

Absence of the appendix is very rare, but that it does exist is shown by the article of Dailey's (11) in which twelve authentic cases are reported.

In 1910, I found this membrane in three cases.

In 1911, to date, I have met with a pericolitis nine times; (females eight, males one, average age 20 years), and the ileal kink six times, (females four, males two; one each 35, 21, 20 and three 18 years of age). In two instances both the ileal kink and the pericolitis were combined in the same patient. Mayo says they are frequently combined. Of those thirteen cases; nine were met with while operating sixteen times for chronic recurrent appendicitis; and four in ten cases in which it was thought advisable to remove the appendix during operations for other abdominal conditions. In one case in which the symptoms were not relieved after the removal of the appendix, I have had the opportunity of performing a second operation, at which time both a membranous pericolitis and an ileal kink

were discovered and remedied. These had in all probability, been present before the first operation, as neither the omentum, the anterior abdominal wall, or the site of the appendiceal stump were involved in either of the adhesions.

(In another case in which there was no amelioration of the symptoms following appendectomy, I recently witnessed Dr. C. J. Combs remove a pericolic membrane, but in this instance there was positively no ileal kink.)

*Symptomatology.*—The clinical symptoms described by Jackson, who does not mention the ileal kink, and those of Martin, who does not mention the pericolic membrane, are practically identical. And each are practically the same as those given by Lardennois (12), for the condition of "Ptosis of the Cecum," in which he makes no mention of either the kink or the membrane.

They are those common to general enteroptosis, such as: malaise, headache, backache, anorexia, nausea, eructation of gas, sometimes vomiting, pain or a sense of fullness after eating, loss of weight and of muscular tone. Constipation may be very obstinate and may be the first symptom mentioned but there may be brief periods of diarrhea. There is frequently a sensation described as "coals of fire" and the right iliac region may become exquisitely tender and so hypersensitive that the weight of even bed clothes becomes intolerable, which of course, suggests the diagnosis of hysteria. The pain varies greatly, from merely a sense of discomfort to that which may demand morphine. The severe colics come on at irregular intervals and the pain and tenderness is usually located in the right iliac fossa and in the region of the umbilicus there may be a demonstrable swelling due to gas in cecum. There is no increase in the temperature, and the attack is terminated or greatly relieved by recumbency, diet, enemata, and lavage, one or all, hence the temporary relief following appendectomy. These attacks of pain are repeated until there is a constant pain in the right side of the abdomen which makes a chronic invalid of the patient.

Later there develops an autointoxication, with greatly impaired nutrition, with foul breath, the clammy extremities, the muddy, hairy skin, the cystic changes in the breast, and the neurasthenia, all so masterly described by Lane, under the caption "Chronic Intestinal Stasis," which is frequently a preliminary stage in anemias, even the pernicious type, tuberculosis and cancer.

Glenard, as far back as 1887, attributes the constipation in enteroptosis to kinks in the colon.

Binnie, in 1905, in describing "Pericolitis Dextra" very succinctly

summarizes the symptomatology by saying, —"Cases presenting an almost typical history of chronic appendicitis with one or more acute exacerbations."

In 1905, Corner and Sargent (13), reported cases of acute volvulus of the cecum, and mentioned that chronic cases may be more common than is supposed, the symptoms being due to an axial rotation of the cecum which imperfectly occludes the lumen of the ascending colon or of the ileum.

Wilms (14), in 1908, and Lardennois in 1910, each describe practically the same clinical syndrome under the title "Ptosis of the Cecum."

At the German Surgical Congress only a couple of months ago, Wilms (15), in discussing movable cecum and chronic typhlitis stated that the attacks of pain may be occasioned by adhesions in the region of the appendix and cecum or ascending colon, so that dragging takes place when the intestine becomes full; or by kinks or torsion of the colon at the hepatic flexure or the attachment of the cecum, temporarily occluding the intestine.

The diagnosis is comparatively easy, especially after the removal of the appendix has been followed by no improvement. The attacks of pain are frequently mistaken for biliary, renal, or appendicecal colic, or disease of the adnexa, and the constant tenderness, often hyperesthesia between attacks is often mistaken for a functional nervous disorder.

A differentiation between primary or idiopathic neurasthenia or hysteria, characterized by right sided abdominal hyperesthesia, and abdominal complaint, and a neurasthenic condition, secondary to actual abdominal irritation is most difficult and uncertain. But with more careful experience and study, the latter class is rapidly increasing in size, at the expense of the former.

The bismuth meal with X-Ray examination has been found to be of practical value by both Lane and Hofmeister.

*Treatment.*—Rational treatment here, as elsewhere in medicine and surgery, depends upon the etiology which, in these cases, is not yet clear.

The false membrane and the angulation of the ileum should be suspected and searched for in every case of chronic appendicitis, in which, at operation, there is a possibility that the appendix might not be the entire source of the symptoms. A satisfactory exploration will not be possible through the small button hole incision so frequently employed in such cases, and will necessitate an incision ample to examine the terminal ileum and the ascending colon. Laparotomy

and division of the band causing the ileal kink, or the removal of the pericolic membrane is plainly indicated. But in so doing results and not the cause have been remedied. And it does not seem to be sufficient treatment, notwithstanding the fact that relief from symptoms does occur in some cases, as in many cases reported by Jackson, Sweetser, and MacLaren (16), and in the case operated upon by Gudden over two years ago.

On two different occasions, Jackson (17), has reopened the abdomen for different conditions and found that no new adhesions had formed in place of the pericolic membrane that had been removed.

Binnie says,—"Removal of the appendix *plus* destruction of adhesions often leads to symptomatic recovery, but often it does not."

Lane has not met such satisfactory results and advocates extensive operations, such as ileo-colostomy, or ileo-sigmoidostomy, or excision of the colon in cases that have resisted less radical measures. Hofmeister likewise performs a short circuiting operation in such cases. In an attempt to prevent the reformation of adhesions, Mayo applies vaseline to the denuded surfaces. Martin, very rationally places the patient in the Trendelenburg posture, after separating the kink, carefully locates the viscera as he thinks is best, then closes the abdomen and applies a firm plaster dressing so that the viscera are kept out of the pelvis. The patient is kept with the head low for days during the convalescence and a properly fitting straight front corset is applied before the patient is allowed to arise from bed, to be followed by a systematic course of abdominal gymnastics.

Assuming the possibility that the development of the pericolic membrane is an inefficient attempt on the part of nature to hold the cecum out of the pelvis (inefficient because it was thin, broad, and caused a marked pull on a broad surface of sensitive parietal peritoneum, and caused pain); in 1909, while removing a pericolic membrane, I left this membrane attached at its inner and lower insertion, this was twisted into a strand which I anchored to the abdominal muscles while closing the wound, in this manner, holding the cecum out of the pelvis in a more efficient manner, that is by a thick narrow cord, instead of a thin broad membrane, and attached to the muscle of the wall instead of to a broad surface of the parietal peritoneum. The appendix should be removed as a matter of routine. This procedure I have repeated eight times and there have been no bad results. The first case is now over 1½ years and there is a perfectly satisfactory outcome. In two of the early cases, there is not much improvement in the condition of the patient: this I now believe is due to the fact that

an ileal kink was not looked for, and this is probably the cause of the unsatisfactory result.

Of the recent cases, those performed during the current year, one may not, of course, speak of results as the time elapsing since the operation is not sufficient.

Wilms (14), of Basle, has reported successful results in 40 cases in which he supported the cecum in a retroperitoneal pouch made by reflecting the posterior parietal peritoneum.

## CONCLUSIONS.

Kinks in the lower ileum, and membranous pericolitis are common in cases presenting symptoms of chronic appendicitis.

Removal of these conditions has been followed by permanent relief in some cases in which appendectomy was not followed by improvement.

They should always be looked for while operating for chronic appendicitis.

In order to do so a large incision will be necessary.

They are probably not of inflammatory origin, but due to ptosis of the cecum.

When present they should be removed or corrected, and an effort made to keep the cecum up and out of the pelvis.

It is not to be expected that this will relieve all such cases, but from a review of the literature and personal experience, it would seem rational to suppose that when liberal abdominal incisions, and correction of these conditions are more common, that our remote results after operation for chronic appendicitis may improve.

## BIBLIOGRAPHY.

1. Lane—Brit. Med. Jour., April 22, 1911.
2. Jackson—Surg. Gyn. & Obst., Sept., 1909.
3. Lane—Surg. Gyn. & Obst., Feb., 1908.
   Lane—Surg. Gyn. & Obst., Nov., 1910.
   Lane—Surg. Gyn. & Obst., Mch., 1911.
4. Hofmeister—Prog. Med., June, 1911, p. 123.
5. Binnie—Month. Cyclop. Pract. Med., Vol. VIII, p. 341.
6. Martin—Surg. Gyn. & Obst., Jan., 1911.
7. Mayo—Surg. Gyn. & Obst., Mch., 1911.
8. Morris—"The Fourth Era in Surgery," 1910. p. 21.
9. Hertzler—Trans. Sect. Surg. A. M. A., 1909, p. 107.
10. Adami. Prin. Path., 1910, Vol II, p. 347.
11. Daley—Surg. Gyn. & Obst., Oct., 1910.
12. Lardennois—Am. Jour. Med. Sci., Sept., 1910, p. 440.
13. Corner & Sargent—Ann. Surg., 1905, Vol. 41, p. 63.
14. Wilms—Zent. fur Chir., 1908, No. 37, p. 1089.

15. Wilms—Jour. A. M. A., May 27, 1911, p. 1588.
16. Sweetser—MacLaren—Trans. West. Surg. Assn., 1908, p. 292.
17. Jackson—Personal communication.

**Discussion.**

PRESIDENT: We are fortunate this morning in having one of Chicago's famous surgeons with us. You know they have three or four down there, but the best all come to Waukesha. I shall ask Dr. Franklin H. Martin to talk on this paper.

DR. FRANKLIN H. MARTIN, Chicago: Mr. President and Gentlemen of the State Medical Society: Not only do the great surgeons of Chicago come to Wisconsin, but all the great surgeons and physicians of Chicago originally came from Wisconsin. (Great applause.)

The paper of Dr. Connell's interests me very much. I have been fortunate enough to be one of the early ones to recognize that there is something else in the right side besides the appendix, and that many of the symptoms hitherto attributed to chronic appendicitis are the result of the conditions so ably described this morning.

It is very difficult for me to discuss this paper, because almost everything that is known on the subject has already been said in it.

There is one thing that I do wish to commend, and that is the very rational way of taking advantage of an abnormal condition in fixing a displaced cecum or one that is inclined to prolapse. The whole question of the Lane Kink is so new that possibly I may be pardoned for speaking a little in primary.

It is about a year ago while visiting Rochester that I saw in one week about 15 cases of the Lane Kink. These cases, some of them, were so marked that all prejudice in regard to the work of Lane immediately disappeared. If one has an opportunity to definitely examine 2 or 3 of these definite kinks, he no longer is a doubter in regard to the pathological condition, and he can certainly be no longer a doubter in regard to the symptoms the condition must produce.

The kink, as you know, occurs at the terminal end of the ileum, and immediately you wonder why it occurs at that particular point rather than at some other point in the 20 feet of small intestine.

If you study carefully the attachment of the mesentery of the small intestine you will immediately get an explanation for it.

When the mesentery of the small intestine begins, as the small intestine begins, it is about two inches in length. At the middle of the small intestine it is about 8 to 10 inches in length, but at the terminal portion of the ileum, within about 3 inches of the cecum, it decreases in length rapidly until the posterior portion of the ileum has a mesentery of not more than an inch or an inch and a half at a point where it enters the cecum.

Now, with this short mesentery here it naturally becomes the center of attachment. As the animal assumes the perpendicular position in evolution the ascending colon becomes absolutely applied to the posterior abdominal parietes; its mesentery is entirely obliterated, and it is fastened at that point in the normal individual, and therefore the colon is held stationary and is one of the supports in the perpendicular individual. The same thing occurs in the descending colon. Now, if the individual for some reason did not evolute, if the mesentery failed to blend, and the cecum failed to become

attached to the abdominal wall, and remains with a long mesentery, as it is in the dog or the lower animals—as the individual assumes the upright position the colon immediately sags, and with it the cecum. That immediately drags upon this point of the ileum with a very short attached mesentery, and the result is that the ileum is dragged upon at that point and immediately becomes kinked, because the balance of the ileum has a long mesentery. In the first place it drags upon its mesentery and produces irritation, and finally the ileum rolls on its mesentery and becomes attached to its mesentery, and immediately because of the rotation and possibly sometimes infection, we have an adhesion between the arms of the kink.

Now, in several of these cases that I saw at Rochester the bowel at this point was obstructed until its calibre was not larger than that of a lead pencil. Naturally that produces a definite stasis upon the ileum. So that you have the local symptom of pain and distress at this point. You also have what you did not have in appendicitis alone, serious stomach symptoms, because anything involving this part of the gut affects the stomach, and you have the symptoms of stasis and toxemia.

There is one other point I wish to speak about—this is too long a question to discuss in full—that is the anemia of this condition. Every little while you will find a patient with pain in the side with chronic appendicitis, and that patient has had blood examinations at frequent intervals, and the internist is querying as to whether there is not really a pernicious anemia developed. It is not a pernicious anemia, but the anemia in this condition may be serious. One patient of this description that I knew of had a blood count of 800,000 with hemoglobin of 25 per cent.

Now, what about the results? I have operated in the last two years, and of course that is a very short time to judge of results, but the results as far as I have gone are positive. What about the results after this kink is straightened out, after the adhesions are stripped, and after you have adopted some means to keep the intestines in their position and to prevent their dragging upon this short mesentery, and to prevent the re-establishment of the kink? As soon as you develop some method that will do that you relieve absolutely all these symptoms. The toxemia that produces the anemia immediately disappears, and in every one of these cases, with the exception of the first one I operated on, the patient has shown the results of the work most in the increase in fat and in the development of flesh.

My method of caring for these cases was outlined in the paper. The patient after the operation is finished, after the separation is made, is placed on a bed in the 15 per cent Trendelenburg position, for the first week. After the abdomen is closed (and that is done in the Trendelenburg position) with the intestines and all the other viscera replaced—and usually the other viscera are prolapsed too, I place over the lower abdomen a strong adhesive plaster corset. Now in doing that you will make a mistake unless you use plenty of padding beneath your corset, in order to have elasticity and give an opportunity for the play of gases. If you put a very thin dressing on and a stiff adhesive corset you will have to remove it within 24 hours, but if you place the corset with a powerful combination pad just above the pubes, under it there will be elasticity enough so that the pressure can be borne. The patient is then placed in the Trendelenburg position. Now in convelescence the part of the intestine where the Lane kink was, is in its normal

position, and you do not immediately get a reformation of this kink, as you will if you allow the patient to get up too quickly.

As soon as the patient leaves the bed she is fitted with a perfect abdominal support. This abdominal support is used with reinforcing pads. She is allowed to go about as usual, and at night the bandage is removed. As she removes the bandage at night she assumes the Trendelenburg position. I instruct them to get a board of the right length, put one end of it on the bed—a very small matter—and lie upon this when the bandage is removed.

While she is in that position I begin the exercise of those muscles, so that if it is a curable case we can develop the muscle and not cause an atrophy as we would if we used the bandage continuously and depended upon artificial support. She is placed in this position and requested to contract the muscles of the abdomen, and while she does that she makes resistance against this contraction of the muscles until she has thoroughly exercised the abdominal muscles. Later if the patients are the kind of patients that cannot be treated unless there is some particular stunt to go through with, and that is often the case, I advise a method of throwing or elevating a large wooden ball weighing 2 or 3 pounds. Place this on the abdomen and she moves it about and forces it up with the contraction of the abdominal muscles. That is carried out in sanitarium treatment and has a very marked effect in exercising the muscles. The same exercise is continued for some time, and the bandage replaced.

After a short time these women can be properly corseted which is another matter. By continuing the exercise they will develop strong abdominal muscles and the support will prevent sagging.

Another thing that I insist upon is feeding. These patients are given a fattening diet. I give them as one of the articles of fattening diet California olive oil in large doses three or four times a day if it agrees with them. That not only fattens them, but the part not absorbed acts as a mechanical laxative, and these individuals frequently will thrive on that treatment.

Sometimes, however, the diet has to be carefully regulated; but the idea is to fatten. Now, the fattening will do another thing. The fattening will pad or thicken the mesentery. You put fat between the layers of the mesentery and you stiffen them, and they will not be so liable to bend. You put fat behind the short mesentery of the colon, and you will gradually overcome the tendency to prolapse.

There is one question that I would like to ask Dr. Connell to answer in closing, and that is in regard to the Jackson membrane. The Jackson membrane is something that I have seen a great many times, and it has been a great puzzle to me, as it is to everybody else, I guess; but I am glad that there is something it can be used for, as is shown by the operation that the doctor has devised.

Now this Jackson membrane is an attempt, probably, on the part of nature to provide for the support of this colon which is not attached posteriorly. Now if that is so I would like to ask if Dr. Connell has ever noticed it on the opposite side, whether the Jackson membrane would not be probably as liable to occur with a loose descending colon, an unfixed one, on the one side as the other.

I have noticed the membrane over the left colon on one occasion. (Great applause.)

Dr. F. Gregory Connell, Oshkosh (Closing): In regard to the question about a similar membrane in the region of the sigmoid, I have not searched for it in my cases. Dr. Jackson has and has failed to find it. Dr. Jackson has also looked in the post mortem room and dissecting room and has found the right sided pericolic membrane, but not on the left side. Mr. Lane finds it in the left side almost constantly, and it would seem quite rational to think that it would occur in the left side.

I have seen adhesions around the sigmoid and the splenic flexure, but these adhesions do not look like the typical membrane that Jackson described with the blood vessels coursing through it, and with the normal serosa movable, as if it was in the back. That I have never seen except in the ileac region, on the ascending colon and the cecum.

---

# CANCER OF THE UPPER RECTUM AND SIGMOID FLEXURE.*

BY KARL W. DOEGE, M. D.,

MARSHFIELD, WIS.

The vast majority of cancerous affections come to the surgeon at an advanced stage. Even external cancers, that are in plain view, often apply for relief after an incredibly long period of visible destruction. Those removed from the surface of the body and affecting the inner organs usually attain advanced growth before recognition takes place. Advanced growth means sure death to the host without operation as well as with operation. That hope of benefit and cure lies in early recognition is conceded by every operator. This however is not always possible at an early stage of the development of cancer and suspicion alone must often suffice as an indication for operative interference. Especially is this so in those instances where the location of the cancer, for anatomical reasons, precludes early recognition and where the diagnosis of necessity must remain a matter of conjecture and surmise, as for instance in the stomach.

Cancer of the anus and lower rectum causes symptoms at an early date. The alert physician will have his suspicion aroused immediately. The symptoms are often so plain and direct that even the less adept should and would know at once. These cases often come to us with the diagnosis of piles ready made by the patient. Only too frequently does the doctor tamely accept the home-made diagnosis of his patient.

How do we suspect and diagnose a cancer of the rectum? It

---

*Read at the 65th Annual Meeting of the State Medical Society of Wisconsin, Waukesha, June 8, 1911.

always is first done by the examining finger. The sooner we use it, the sooner will we detect the growth. Neglect of the use of this valuable diagnostic means will leave us in doubt, will result in procrastination and death.

The diagnosis of cancer of the rectum, except those that can not be reached by the examining finger, is readily made even at an early stage of development. But, in spite of this, these cases come to the operator at a late period. There are several reasons for this. The disease is latent for a long time. When symptoms such as pain, diarrhea, constipation and hemorrhage *do* occur, they are often misinterpreted both by patient and physician. Among physicians the belief is still prevalent to a great extent, that, if cancer be present, the patient ought to show from the first a general breaking down and a cachexia. We know of course that that is not the case,—that the general health need not suffer for a long while. Only when pain, hemorrhage, chronic sepsis and symptoms of obstruction occur, do these patients begin to show the pale, yellow, anemic appearance which constitutes the cachexia carcinomatosis. To wait until these signs are present, before digital exploration is resorted to, is a most serious neglect.

As a means of diagnosis of rectal disease the finger ranks first. The speculum, the proctoscope and sigmoidoscope are merely trailing after. To the physician all complaints pertaining to the anus, rectum and lower bowel must be a challenge for digital exploration. To miss it may mean an injustice to ourselves and a crime to our patient. With routine digital rectal exploration the suspicion of cancer is ever present and its early recognition cannot be long delayed.

At the beginning the cancer can be felt as a flat, hard infiltration beneath the mucous membrane. Its mucous covering soon becomes eroded and ulcerates. It is a rare thing for us to see a case in this stage. As the ulceration deepens, a wall of granulation tissue surrounds it, and can be palpated as a nodular, irregular growth. As ulceration extends, contraction takes place and eventually leads to partial or complete obstruction of the lumen of the bowel. The degree of prevalence of connective tissue that enters into the formation of these tumors to a certain extent marks their degree of malignancy. The harder, scirrhus ones, being much less rapid in growth than the softer constructed ones.

Cancer of the anus and lower rectum has a uniformly bad prognosis, with and without operation. The reason obviously is its early involvement of the surrounding tissues and high lymphatics.

Cancers of the upper rectum and sigmoid have a better prognosis

than we would expect. This part of the intestinal tract is not intimately connected with the surrounding structures. It is free and movable, and its only connection with the pelvis is its mesentery. Cancer may exist a long while before extension to adjacent organs renders it inoperable. Involvement of the pelvic lymphatic glands occurs comparatively late, and when it does occur the glands are often readily removed. Recurrence after radical operation by the newer method takes place more often distally, in the liver and lung, than locally. Its hidden location is its most serious feature. On account of it, the diagnosis is most usually delayed. Its presence is not suspected until either hemorrhage or intestinal obstruction occurs. But, even in spite of these disadvantages, the prognosis after operation is better than that of the lower rectum and anus.

Pain may be an early symptom. This pain is really in the tumor itself. It is paroxysmal in character, and is caused by excessive peristaltic movements. As long as the intestinal current is unimpeded, pain may be almost absent. Where, however, partial obstruction takes place, increased and often violent peristalsis becomes necessary to propel the ingesta onward and thus causes pain. Hemorrhage is the most frequent and the earliest objective symptom. It does not occur until the tumor has attained considerable size, and has begun to disintegrate. The appearance of blood in the stool, even if in large quantities, usually does not alarm the patient. If it occurs with or after a stool, he assumes that he has hemorrhoids. I recently saw a patient who had had bleeding for over a year. He and the attending physician had diagnosed piles and had even proceeded to operate for piles. Under an anesthetic no hemorrhoids could be found. It is evident that no previous digital examination had been made.

These hemorrhages at first occur with or after a stool, later they may come without it. Mucus stools and diarrhea are frequently present. One of the first cases that ever came under my observation sought medical aid on account of diarrhea. He would have from fifteen to twenty passages a day. They were mainly mucus in character, tinged with blood and accompanied with a good deal of straining. Digital examination revealed a tumor. At the operation it was found to be situated in the sigmoid. It had invaginated the bowel by traction, and at stool almost presented at the anus. The mucus stools were produced by the irritation it caused to the healthy mucous membrane. Until the tumor is found, such cases are treated for mucus colitis.

Early ulceration of the tumor mass leads to contraction of the lumen of the bowel, and causes obstinate constipation and retention of

feces. A case of mine had had periodical fecal impaction for over a year, leading to great distension and fecal vomiting. At operation the colon above the tumor was found greatly dilated, to a diameter of from five to six inches and was filled with feces. The distension of the bowel under such conditions may be something enormous.

The examination of such cases should always be preceded by a thorough evacuation of the bowel so as to produce a flat abdomen. If the tumor is situated in the sigmoid it can often be readily palpated, if in the pelvis, rectal digital examination will most usually reveal it. Most generally the tumor can be felt per rectum as a hard movable mass. It remains movable as long as it is confined to the bowel. If infiltration of the surrounding tissues of the pelvis takes place, it may become partially or even completely fixed. My last case presented a perfectly solid immovable mass per rectum and to all intents and purposes resembled an immense hypertrophic prostate. The tumor had ulcerated and infected the pelvis, creating a large inflammatory mass which fixed the entire tumor to the anterior and lateral walls of the pelvis. Movability of the tumor may be in wide ranges, especially in an upward and downward direction and often leads to erroneous impressions as to its exact location. One of my cases presented the tumor almost at the anus, and it was considered a cancer of the rectum. Yet at operation it proved to belong to the upper part of the sigmoid. It had invaginated the entire bowel until it had reached within an inch of the anus. This erroneous impression in my case lead to a serious mistake during operation, since the attempt to remove it was made through a Kraske incision through which, after the patient had been placed in the exaggerated lithotomy position, the tumor could not even be reached, and an additional median incision became necessary for its successful removal. I would therefore advise to examine all cases of movable tumor first in the horizontal and then in the knee-chest position. The knee-chest position will allow the tumor to drop back to the full extent, and, if situated in the sigmoid, it will disappear from the pelvis, and can be felt through the abdominal wall. It is desirable to ascertain, as near as possible, the exact location of the tumor, and the knee-chest position will aid us in this materially.

It will be noticed that in discussion of the examination of the patient, I have thus far only spoken of ascertaining the subjective symptoms of the patient, of abdominal palpation and rectal digital examination. In the preparation of this paper I have mainly drawn from my own limited personal experience and I must confess that I have not made use of those important aids to diagnosis which are

to be found in the use of the proctoscope and sigmoidoscope. With the use of these instruments additional information may be gained which of course is of additional importance and aid. However there are surgeons who do not think the use of the cystoscope necessary previous to operation for enlargement of the prostate. Thus I do not think the use of the sigmoidoscope absolutely necessary in the cases under consideration. I will admit their usefulness but do contend that the additional information attained is far inferior to that obtained by a careful and intelligent use of the finger and palpating hand.

The treatment of cancer of the upper rectum and sigmoid is of course entirely surgical. The results attained by modern methods have been encouraging. The fact that most of these cases come to us for treatment at an advanced stage of development, makes it important to ascertain a complete mental picture of the case in all aspects. Whether a radical operation is still advisable or not, is the question to decide. Radical extirpation can only be thought of if there are no evidences of metastatic growth, and if only the nearest lympatic glands are affected. Metastases in the liver, or elsewhere, makes extensive extirpation superfluous, and calls for permanent colostomy and the relief it affords. Operative interference of some kind however is always imperative. The obstructive symptoms alone are usually such as to require peremptory relief. The true situation can only be determined by opening the abdomen. This done, careful examination should be made as to the exact location of the tumor, its mobility, the involvement of the mesentery, involvement of the proximal lymphatics, adhesion to adjacent structures, the amount of hypertrophy and distension of that part of the bowel above the tumor, and the presence of metastatic growths in the liver. After carefully considering these conditions, and weighing them together with the general health of the patient, and with the urgency of the symptoms as to the degree of intestinal obstruction and the amount of hemorrhage present, the nature of the operative interference required should be determined upon. Great distension of the proximal bowel due to fecal accumulation is always a contraindication to immediate excision and complete radical operation. The work then should be done in two or three stages. It is a great deal wiser to establish a temporary artificial anus first than to attempt to do the whole work at one sitting. In selecting the place where the colostomy is to be made we should choose a point sufficiently distant from the obstruction so as not to interfere with the space required, and length of available gut needed at the subsequent excision of the tumor. Since the incision required for the

removal of the tumor, no matter where it is located, is preferably a central one, the artificial anus should be established as far laterally as possible, and as far away as practicable from the length of the bowel that subsequently will be needed to form the anastomosis. The reason for this is apparent. For if the opening in the obstructive gut be too close to the subsequent excision, it would greatly hamper us in obtaining sufficiently loose bowel to form the anastomosis on account of its being fastened to the abdominal wall, and if the opening in the abdominal wall be too near the center, it would add to the chances of infection at the second operation. The establishment of a preliminary artificial anus has decided advantages. It relieves the overloaded intestinal tract at once, thus removing pain, and adds to the patient's rest, digestion and general comfort. As the overloaded bowel becomes gradually emptied, the dilated colon contracts again and assumes more normal proportions. It is remarkable how quickly almost normal conditions will occur. In one of my cases a bowel that at the time of operation was at least ten times its normal caliber, was practically normal at the second operation three weeks later. To attempt to do the radical operation at once, in cases completely or nearly obstructed is foolhardy, and will always be followed by serious consequences. Relief of the obstructed bowel would at once take place by way of the new anastomosis, and seriously endanger its security. No attempt need necessarily be made to close the artificial anus at the second operation, when excision of the tumor has been done. Its existence for a few days or weeks longer will be an advantage, in so far as it insures complete rest and allows firm union of the bowel-suture to take place before its security is endangered by peristalsis and distension. Most generally spontaneous closure of the artificial anus takes place after the fecal circulation is re-established. In our case its closure formed a third step in the operative work.

In those cases where obstruction of the fecal current has not occurred, a preliminary colostomy is not needed, and radical extirpation can be attempted at once, if due preparation of the patient has preceded it. By this I mean that there must be an absolutely flat and empty gastro-intestinal tract.

Assuming that radical extirpation has been determined upon, the incision I have used is a central abdominal one, and the two great questions to be solved by the operator are: 1st, to obtain a sufficiently loose length of proximal bowel to fill in the gap resulting from the extirpation and 2nd, to be sure of its blood-supply and viability.

In my last case I removed eight inches of the upper rectum and sigmoid, and in filling the void, made use of the method suggested

by Moynihan of England, and which is fully described in a recent number of Surgery, Gynecology and Obstetrics. The method is best carried out by making an incision from on the outer side of the base of the descending colon from its splenic flexure down to the rectum through the peritoneum only. Then, pulling the bowel to the median line, by means of a sponge you can separate, lift away and loosen the entire descending colon, sigmoid and upper rectum until you can see the transparent inner blade of the peritoneal covering, near the spinal column. The stretch of loose bowel thus obtained, and available for purposes of anastomosis, is something remarkable, and often over-abundant, and it would be hard to conceive of there ever being a shortage if this method is employed. Having wiped loose the structures as described, and having reached the inner peritoneal coat, we have in our hands the bowel and its entire blood supply, no hemorrhage having taken place at all. Holding up the bowel, we can easily see the middle colic artery from the superior mesenteric, the inferior colic, the sigmoid and upper hemorrhoidal arteries from the inferior mesenteric and can study, and if necessary, test the free anastomosis of these vessels. In a few copies of drawing I have attempted in a crude way to make this intelligent. By compressing the inferior colic it can be seen that the anastomosis with the middle colic is amply sufficient. The anastomosing loops between the sigmoidal and inferior colic artery are abundant and even if the entire inferior mesenteric is ligated close to its origin the blood supply to the sigmoid would still be amply carried on by the anastomosis with the middle colic artery of the superior mesenteric. Having determined the length of bowel that is to be sacrificed, the inferior mesenteric artery is ligated close to its origin. Then clamps are applied doubly to each side of the bowel ¾-inch to each side of the tumor. Now an incision is carried from the ligated stump of the inferior mesenteric artery through the mesentery to the upper two clamps and the bowel cut between the clamps, and a second cut is made from the same point as the first one, and carried through the mesentery to the lower clamps and the bowel there also cut through. The part thus liberated contains the diseased bowel and a triangular piece of mesentery with all the involved glands and lymphatics and mesenteric fat. If other enlarged glands are felt, the peritoneum is split over them and they are enucleated. All hemorrhage from the cut edges of the mesentery is now caught and ligated. It now will be found that owing to the previous liberation of the colon, the upper end of the bowel can be brought with ease down into the pelvis and even down to the anus. The end-to-end anastomosis now can easily be made by any method with which the

operator is best familiar. If the suturing is too deep in the pelvis for easy work, the upper end of the bowel is closed by tying a silk ligature around it. Then a tenaculum is passed through the anus to the cut end of the colon by an assistant and made to catch its cut margin. Now withdrawing the forceps the rectum is telescoped and drawn out of the anus. A second forceps is now introduced from below through the rectum which catches the silk ligature thrown around the upper free end and by drawing on it the colon is made to appear outside of the anus. The closing ligature having been removed through and through sutures are applied and the anastomosis is made outside the anus by the Mannsel method. This completed, the inverted bowel is drawn back. If there is any doubt about the asepsis during the operation I find it advisable to drain the pelvis either through a vaginal opening or through a small posterior puncture near the anus. I have done this in two cases and have had reason to be satisfied with it. The abdominal incision is closed.

In summing up, I would offer the following points:

1. Digital rectal examination is indispensable in all diseases afflicting the lower bowel.

2. Examination in both prone and knee-chest position is advisable.

3. Operative interference is necessary in all cases.

4. First do a central laparotomy, and examine into local condition, and, if dilatation is present due to obstruction, do a colostomy through separate incision, and close abdomen.

5. If the absence of metastatic growth make radical operation desirable the continued method of operation is to be preferred.

6. The absence of cachexia is of no diagnostic value.

---

## INTRAPERITONEAL RUPTURE OF URINARY BLADDER. WITH REPORT OF CASE, RESULTING FROM AUTOMOBILE INJURY.*

BY EVERETT L. MASON, M. D.,

EAU CLAIRE, WIS.

*Anatomy.*—The bladder may be devided into three chief portions: the middle and larger portion of the bladder is the body; the upper portion, which is distinctly pointed, especially in the newborn, is the vertex; and the lowermost portion, directed toward the perineum, is called the fundus.

---

*Read at the 65th Annual Meeting of the State Medical Society of Wisconsin, Waukesha, June 8, 1911.

The vesical wall consists of a mucous coat, of a muscular coat, and of a serous coat. The serous or peritoneal coat is not present over all parts of the bladder; it is a reflection of the peritoneum and invests only the upper surface as far as the vertex and the upper part of the lateral surfaces. At the posterior surface the peritoneum is reflected to the rectum in the male and to the vesical surface of the uterus in the female. It attains the lowest level in the male between the ampullae of the vasa differentia. The peritoneum is but loosely attached to the lateral portions of the bladder, but at the middle segment of the viscus it is rather firmly adherent. The anterior wall, the lower portions of the lateral walls, and the fundus of the bladder have no serous covering whatever, and between the posterior surface of the symphysis and the anterior surface of the bladder the prevesical space, which is filled chiefly by loose fatty tissue, is situated. The entire surface of the bladder is covered by a layer of fascia, which rests upon the external muscular layer and forms the outer coat of the bladder in those situations which are uncovered by peritoneum. It is a portion of the visceral layer of the pelvic fascia. The form, size and position of the bladder varies widely under normal circumstances with the age and sex of the individual, also from the amount of contained fluid.

In the child the bladder is almost an abdominal organ, but with increase of years, it sinks to its adult position in the pelvis.

When we consider the protected position of the organ we must conclude that accidents to it, whether intra-, or extra-peritoneal, must be comparatively rare, and a review of the literature shows but a small number of reported cases, especially of the intra-peritoneal variety.

Herrick reported the cases occurring in Cook County Hospital, 1889—1893. Out of a total of 8,000 surgical cases there were five of rupture of the bladder. St. Bartholomew's Hospital report, quoted by Herrick, mentions but two cases out of 16,711 surgical cases occurring in the years 1869 to 1875. At the Episcopal Hospital, Philadelphia, from January 1, 1900, to January 1, 1905, there were 8,367 surgical patients with three intra-peritoneal ruptures of the urinary bladder.

Most intra-peritoneal ruptures occur when the distended bladder is compressed suddenly and forcibly against the promontory of the sacrum from kicks, blows, falls upon the front of the abdomen, or falls from a height upon the buttocks; runover accidents; fractures of the bones of the pelvis, (though these more often cause extra-peritoneal rents); gunshot wounds and stab wounds.

Davis Fiske Jones reports eight cases with the following etiology:

1. Run over by cart. 2. Denies injury or drunkenness. 3. Run over while drunk. 4. Cake of ice fell on him. 5. Run over by wagon. 6. Fell out of window while drunk. 7. Ran into post. 8. Refused to admit any injury or drunkenness.

*Predisposing Causes.*—1. Disease of the bladder wall. 2. Acute and chronic alcoholism. The last because a drunken man is apt to have a full bladder and to meet with accidents.

*Nature of Tear.*—The tear may be vertical or transverse. In the latter cases they gape but little. The tear may be a straight line, angular, or L shaped; in other cases the tear may look like a loss of substance especially when it occurs with fractures of the pelvis. They may vary in size from one-half to several inches; a tear may occur in parts covered by peritoneum, but involve the mucous membrane and muscular coat only.

John Marnoch reports a case with a median rupture that was both intra and extra-peritoneal.

Ewing reports a case in which there was a rupture of the peritoneal and muscular coats without rupture of the mucous coat. This is explained on the theory that the peritoneum which is not nearly so elastic as the muscular and mucous coats, gives way early and carries with it the muscular coat.

Malignant growths have been reported as causative factors, also instrumentation with sharp sounds when examining for stone in the bladder, though in most cases of this character the tear or puncture will be extra-peritoneal at the base of the bladder.

*Symptoms.*—The first symptoms are those of the initial injury and later follow those resulting from a peritonitis or toxic state which may or may not occur.

Alexander Bryan Johnson states that "Since rupture of the bladder usually occurs from extreme degrees of violence, and often associated with fracture of the pelvis, shock is usually marked. The shock may endure until death, the patient never reacting. In other cases shock will be less marked and the patient will suffer from a constant desire to urinate, from extreme pain referred to the bladder or lower part of the abdomen, and from either total inability to urinate, or, if able to urinate at all, a small quantity only of bloody urine will be passed. The presence of these symptoms is very constant. In addition there may be nausea and vomiting, and after hours or days the signs of acute peritonitis, septic symptoms," etc.

Upon introducing a catheter, it may pass readily into the bladder, but a few drops only of bloody urine, or nothing at all will escape.

The bladder is empty. If a long catheter is used it may, if of metal, after entering the bladder pass through the rent into a considerable cavity and permit the escape of a quantity of urine and blood. If a catheter be introduced into the bladder and salt solution in measured quantity injected through it, none or a diminished quantity will return. Alexander condemns this test as not fully reliable and apt to cause a peritonitis by introducing infection from the urinary tract into the peritoneal cavity. In some cases of intraperitoneal rupture the signs of free fluid in the belly have been observed, notably if the patients have survived several days without operation.

*Differential Diagnosis.*—Differential diagnosis must be made from suppression, ruptured kidney, ruptured urethra and abdominal ascites.

*Pathology.*—Jones divides the cases of peritonitis into four classes; (1) Those in which the bladder is already infected at the time of accident; (2) Those in which the bladder and the peritoneum are infected by catheterization or by injection tests; (3) Those in which the peritoneum is infected at the time of operation; (4) Those in which the peritoneum is infected by leakage of the urine after the operation.

Johnston states that "When the rupture is of some size, and intra-peritoneal, the bladder empties itself into the peritoneal cavity, with the production of a fatal, putrid, or purulent peritonitis."

Marnoch reports a case operated upon over twenty-four hours after the accident and makes the following conclusion: "The absence of peritonitis is noteworthy and once more explodes the old idea that peritonitis is set up as soon as urine escapes into the peritoneal cavity. In this case it was evidently due to the aseptic condition of his urine."

Edward Quick reports a case in the Cook County Hospital operated upon ten days after violent injury to the abdomen during a drunken brawl, in which there was no peritonitis. This man worked some the two days following the injury. My own case showed no peritonitis thirty-three hours after rupture.

*Treatment.*—Immediate operation is indicated as soon as the diagnosis is made. A free incision should be made above the pubis exposing tear in bladder, to permit suturing it, if possible. The Trendelenburg position may aid in placing of sutures. It may be impracticable to introduce stitches because of peritonitis or the desperate condition of the patient; in such a case a tamponade of gauze may be used instead, passed to the bottom of the pelvis, using plain or iodoform gauze.

In most cases the rent in the bladder should be closed by closely

applied silk or linen interrupted sutures. The bladder should be drained by a retained catheter introduced through the urethra.

C. K. Briddon drains through a perineal incision, but I see no reason for adding additional traumatism if the urethra can be used.

Alexander reported four cases of peritonitis due to leakage of the bladder wound. The employment of drainage will lengthen the period of convalescence in all probability, give a larger scar and require more after care, but these are minor considerations when compared with fatalities that such drainage may prevent.

In regard to choice of drainage material, Jones claims gauze drainage is preferable to tubes in that it effects a walling off of the sutured region and by adhering to the bladder wall will relieve the sutures of a great deal of strain during the first four or five days, and here as in other places the mistake is more likely to be made of removing the gauze too soon rather than too late.

Some recommend the injection test after suturing bladder to see if sutures will permit leakage, but in my opinion that adds to the time of operation increases the danger of infecting the peritoneum, and as most of these cases are in a bad way by the time they come to the operating table, this diagnostic test of injection should be omitted.

*Causes of Death.*—First, shock from the initial injury; second, hemorrhage which may be primary or secondary; third, toxemia from absorption of urine; and fourth and by far the most common cause, peritonitis which may result from the primary escape of urine especially if it escapes from an infected bladder, from infection during the operation, and lastly from leakage of urine through wound.

*Report of Case.*—L. J., a little girl two years of age, was knocked down and run over by an automobile August 6, 1910. The car was a Model F. Buick, carrying four people, and weighed with its load somewhere in the neighborhood of 2,500 lbs. The child was thrown upon a brick pavement and the front wheel passed over the lower abdominal region. The accident occurred at 11:30 A. M., during a circus parade. The bladder had been emptied at about 8 A. M.

The child was carried into a doctor's office near by where an examination showed no broken bones. A superficial wound of the face was dressed and the child taken to her home.

She soon began vomiting, and complaining of severe pain in the abdominal region where the wheel had passed over her. There were constant and unsuccessful attempts to pass urine through the night. Extreme thirst was present, but the water taken was vomited almost immediately on reaching the stomach.

I saw the child the next morning at 11 A. M. Examination showed a little girl of two years, very restless; complaining constantly of pain; superficial wounds of the face; face pale; eyes sunken, and surrounded by dark rings; abdomen moderately distended, and too

painful to allow of learning anything by percussion; palpation showed but little setting of abdominal muscles; temperature 100; pulse 120; two small ecchymotic areas on both legs; no urine voided during the twenty-four hours now elapsed since the injury.

The child was taken to the Sacred Heart Hospital and the question raised whether the anuria was due to a ruptured bladder or from a suppression from traumatism to the kidneys and large loss of fluids from the body due to the very frequent attacks of vomiting. A small rubber catheter was passed with difficulty and a few drops of bloody urine obtained. Owing to the struggles of the child and the extremely small urethra there was a chance that the blood might have come from the walls of the urethra. Everything, however, pointed to a ruptured bladder. We decided to put the child to bed, start salt solution per rectum, apply hot applications over the kidneys and wait a few hours, more to satisfy the family and let them get the father and other relatives, all of whom must give their consent before the baby could be operated upon.

By 6 P. M. most of the family had consented to operation. But little of the salt solution was retained per rectum, owing to the child's frequent attempts at urination. Dr. McKittrick saw the case with me at 6:30. The catheter was again passed under difficulties and as before, a few drops of bloody urine was obtained. We recommended immediate operation and consent was finally granted. At 8 P. M. Doctors McKittrick and Cook assisting, we etherized the child and operated.

Her condition now was such that it was plainly evident to the family as well as to ourselves that without operative aid, death would soon follow and as Dr. Murphy says "We must get in quickly and get out quickly."

A median, suprapubic incision, three inches long was made. Immediately on opening the peritoneum a large quantity of free fluid, uriniferous in odor, escaped through the incision. The peritoneum was deeply congested, but no roughening or fibrinous deposits in any place.

A straight tear, one inch long, on the superior surface of the bladder extending through all three coats was located without difficulty. The abdominal cavity was washed out with normal salt solution.

Owing to the poor condition of the child we did not think it best to take the additional time to make a careful suturing of the bladder and urethral drainage. A half-inch rubber tube was inserted into the bladder and secured by a purse string suture of silk. Two half-inch drainage tubes were inserted in the abdominal cavity, and a considerable quantity of plain gauze packed around them, and deep into the pelvis walling off the intestines. The abdominal wound was closed with silk-worm sutures passed through and through.

The whole procedure occupied twenty minutes. The child was put to bed in the Fowler position and salt solution injected under both breasts. The needles were left in place and more solution added as fast as absorbed. This was kept up until midnight when the patients condition was so much improved that hot water was allowed

by mouth and now that straining had stopped salt solution was again attempted per rectum.

The drainage tubes were removed from the abdominal cavity on the third day, the gauze being left for several days longer. At the end of three weeks the drain in the bladder was removed, but the child still passed no urine by urethra and began to complain of severe pain in the bladder.

Catheterization was well nigh impossible, owing to the small size of the urethra and the struggles of the child, together with the obstruction that the catheter seemed to meet, so she was anesthetized and the incision enlarged to admit a finger into the bladder. The fundus was filled with soft concretions, showing how quickly they form in incomplete drainage. These were removed, a small catheter with frequent openings cut in its sides passed through the urethra and out abdominal wound, and a strong silk ligature fastened to either end of catheter, in much the same way that the suture is placed in plugging the posterior nares for hemorrhage. This was done to insure the retention of catheter. The bladder was irrigated daily with boric and soda solution. As the abdominal wound grew smaller, the catheter was drawn down into the bladder, the suture removed from the catheter, and the catheter retained with adhesive plaster on the thigh. But this frequently failed to hold, and I still have a picture of numerous and lively scenes of catheterizing the child in the office after she had left the hospital. We feared a return of the concretions if free drainage was not maintained. The supra-pubic wound was open for two and one-half months. The catheter was then removed from urethra and the child has had no trunoble since. Her retention was poor for six weeks after removal of catheter, but this gradually improved and she is now a strong, healthy little girl, quite fond of her doctor in spite of the numerous scraps that we had in catheterizing her during the slow convalescence.

In closing I will say that given another case in as poor condition as she was when operated upon, I would rather face the long and tedious convalescence from the bladder and abdominal drainage rather than to take chances with the child's life on a complete closure which would certainly be desirable and the better course if the patient's condition had warranted it.

BIBLIOGRAPHY.

1. Atlas and Text-Book of Human Anatomy. Sobotta—McMurrich.
2. Text-Book of Human Anatomy. Frederic H. Gerrish.
3. Quick—Intraperitoneal Rupture of the Urinary Bladder. Annals of Surgery. Jan., '07.
4. Jones—Intraperitoneal Rupture of the Urinary Bladder. Annals of Surgery, Feb., '03.
5. Mornoch—Two cases of Rupture of the bladder. Annals of Surgery, Feb., '06.
6. Ewing—New York Medical Record, Vol. 47, 1895.

7. Johnson—Rupture of the Urinary Bladder. Surgical Diagnosis, Vol. II.
8. Briddon—Annals of Surgery, Dec., '95.
9. Alexander—Annals of Surgery, Aug., '03.

**Discussion.**

DR. EVERETT L. MASON, Eau Claire: The death rate has been extremely high in intraperitoneal ruptures. One of the causes is that they come too late, and another is that there has been a high death rate from leakage of the wound in the bladder, and it is because of that that I did not attempt closure at the time.

A case has been reported that was operated upon 10 days after the injury, in which the surgeon sutured the bladder and the man lay at the hospital only 10 days. You see how much more of an ideal repair you get in a case like that. But when you read the reports and see that the death rate has been over 50 per cent, it makes you hesitate about closing the wound without providing drainage. I certainly would provide abdominal drainage in all cases, but if my case would permit I would close the wound in the bladder at the time of operation.

---

# RELATION OF THE PHYSICIAN TO ANIMAL EXPERIMENTATION.

BY WALTER RITTENHOUSE, M. D.,

LAKE GENEVA, WIS.

If the subject of Animal Experimentation needs any new excuse for again engaging your attention, I will take as that excuse, a recent number of a popular magazine of humor, which contained a double page illustration that was calculated to deceive the very elect on this vital subject. It was so carefully done, entirely devoid of the usual obvious exaggerations of humorous drawings and its import so carefully hidden that the reader must first submit himself to the atmosphere of the picture before he can read its meaning.

Quite aside from the immediate danger of restrictive legislation on the subject, which I do not consider as very imminent, the physicians of the country owe it to the general public to be intelligent on the subject of what Animal Experimentation has done, is now day by day, doing, and what, in the hopes of conservative men it will do, for the advancement of knowledge and training in the profession.

*The Past*: The debt of gratitude already incurred. Edward Jenner made and perfected his great discovery of *vaccination* by means of experiments on animals. He declared vaccinia to be an attenuated form of small-pox, but the proof of it did not appear for about one hundred years. During this time the opponents of vaccination made

much capital out of the alleged lack of relationship between the two diseases; but it has now been repeatedly demonstrated that the intensely contagious virus of small-pox can be transformed into the benign vaccine virus, the latter having the property of protecting against small-pox when inoculated into the human subject. This transformation takes place merely by successive inoculations of calves through several generations. Ignoring this well established fact, the opponents of vaccination continue to urge the distinction of the two diseases as one of their prominent arguments.

Nevertheless, this discovery has another value. In the case of loss or attenuation of existing strains of virus, or in the event of a vaccine famine, such as occurred in 1871, or in the case of an extensive epidemic of small-pox in a remote or inaccessible country where the vaccine virus could not be secured, the ability to convert the small-pox virus into vaccine virus would be a great boon.

"Everything that has a direct bearing on the prevention of *tuberculosis,* everything that has changed mankind's attitude toward it, from one of apathy and hopelessness when the infectious agent which produces tuberculosis was unknown, and the disease was thought to be inherited and always fatal, to the growing hope of its ultimate conquest, . . . we owe to animal experimentation." Trudeau.

Klencke in 1843 demonstrated by inoculations into rabbits, the infectious nature of the tubercle but little attention was paid to his report and it was not until Villemin in 1865 by a fuller series of experiments, confirmed Klencke's views, that the subject received general recognition. Following Villemin a host of animal experimenters brought forth numerous isolated facts of importance concerning tuberculosis, but not until Koch in 1882 presented his paper on the etiology of tuberculosis, announcing his discovery of the tubercle bacillus as the direct cause of all tuberculous and scrofulous lesions in man and animals, did the scientific world and the general public take cognizance of the relation of these facts to the treatment of the tuberculous patient. "The unbroken chain of evidence forged by Koch in his logical demonstration of proof was obtained entirely by carefully controlled animal experiments." Trudeau.

Some of the links in the chain may be enumerated, thus,—Klebs in 1868 proved the infectiousness of the sputum; Gerlach in 1870 proved that milk from infected cows could carry the disease, and Cornet demonstrated the dangers of dried sputum, all solely by experiments on animals. Since Koch's discovery of the tubercle bacillus, the course and exact mode of entrance of the bacillus into its host, and the complex mechanism by which that host resists the

progress of its malignant guest have all been learned by the use of the lower animals. The success of the treatment based on the knowledge deduced from these sources is sufficient proof of the correctness of the deductions.

The history of *cancer* research is written in the same red ink—the blood of sacrificial offerings. Progress along this line being more recent and having the benefit of the experience obtained in the work on tuberculosis and other infectious diseases, has been more rapid. Up to the time that it was admitted that the lower animals are liable to cancer, all the efforts at fathoming the secrets of cancer's life history availed but little. What facts were worked out from investigations on the human subject have been ably used by the surgeon. The wisdom of an early recognition and complete removal of cancer, is a lesson that has been well learned. Yet cancer is on the increase. From the operating surgeon the cancer patient can hope only for an earlier resort to the knife, and it is doubtful if this prospect has been any more abhorrent to the patient than to the surgeon.

Behold then in 1902 a sudden and revolutionary activity in the realm of cancer research! Institutions, societies and periodicals are organized to give their exclusive attention to the subject. Profession, press, and public eager for "the latest news from the front." What does it mean? Whence comes the impetus? One hundred and thirty years ago the first attempt to transplant cancer into lower animals, met defeat and oblivion, to be followed by a numerous train of similarly unsuccessful efforts, but in 1902 in the wake of several successful skirmishers, Loeb in America and Jensen in Denmark reported victory in their respective studies of transplanted cancers in rats and mice. The experimental study of cancer has been energetically taken up in England, Germany, France, Austria, Japan, and America, with the result that in five years, new facts of first importance have been demonstrated. The final value of these facts remains to be determined, but that they suggest large promise for the future, needs only the enumeration of a few, to be acknowledged.

1. Jensen has shown by transplanting a cancer through several hundred generations of mice, without diminishing the vitality of the growth, that cancer may apparently grow forever if suitable environment be provided.

2. The conditions under which transplanted cancer cells will grow, are extremely narrow. Haaland's cancer grew well in Berlin mice fed on milk, but not at all or with great difficulty when transplanted into Copenhagen mice of exactly the same species, fed on

carbohydrates. May we not find in this fact some hope for a rational treatment for cancer along general therapeutic lines?

3. It has been repeatedly demonstrated on animals that malignant tumors may regress.

4. Most animals that have recovered from cancer either spontaneously or after incomplete removal, are thereafter immune to cancer.

5. This immunity has been demonstrated to be transferable as is the immunity of the infectious diseases, such as diphtheria, typhoid, etc.

6. After repeated transplantation, cancers have been found to increase in rapidity of growth, and in the capacity to survive transplantation, that is, increase in virulence. Appropriate to this fact there have been produced strains of graded virulence and therefrom increasing degrees of immunity.

The search for the cancer parasite has been abandoned, the energy of cancer students has been concentrated on the few points of promise above indicated and what the future will produce we can only reason about by analogy.

The history of *rabies* like that of small-pox, tuberculosis, and cancer is marked into two periods, before and after, the use of animal experimentation in the study of the disease, the former period characterized by a little knowledge and that little, so mixed with superstition as to be useless in the fight against the ravages of the disease, the latter period by a growing knowledge and a growing hope, and confidence. The Pasteur treatment of rabies was born and bred, and lives today by animal experimentation.

*Typhoid, dysentery and cholera* have yielded a less striking victory in the realm of therapeutics but sufficient success has attended the efforts to produce antitoxic sera to encourage the investigators to renewed efforts. More has been accomplished by animal experimentation in the field of diagnosis of these diseases. Bacillus carriers and obscure cases of typhoid, have often been brought to light by animal inoculations; cultural and microscopic diagnoses being inadequate in such cases. Similarly in cholera and dysentery the final word in a disputed diagnosis must be left to the animal experiment.

The discoveries of the specific sera for the treatment of diphtheria, cerebro-spinal meningitis and tetanus are also the fruit of animal experimentation.

So much has been added to our knowledge of the nature and the treatment of disease by animal experimentation.

Now a word as to the role of animal experimentation in the everyday practice of our profession.

1. It is an essential part in the process of preparing the specific sera of diphtheria, cerebro-spinal meningitis and tetanus.

2. It is necessary to the production of vaccine virus from calves.

3. It gives us the specific agglutinins so essential to the discovery of bacillus carriers, of typhoid, cholera and dysentery. At Hamburg in 1892 a few unrecognized cases (possibly one case) of cholera infected the River Elbe, nearly 17,000 people who drank this water contracted the disease and about half of them died. The number of similar calamities that have been prevented by the use of the agglutinin diagnosis since its discovery, can only be conjectured.

4. It constitutes an essential part in every successful campaign against plague. Animal inoculations, are the only reliable means of diagnosing the plague bacillus.

5. The same may be said of rabies.

6. It gives us the only means of distinguishing between a live and a dead tubercle bacillus. This is important in deciding on the efficiency of any proposed method of sterilization.

7. It is often resorted to in the diagnosis of disputed cases of diphtheria, tetanus, pneumonia, Malta fever, anthrax, glanders and actinomycosis.

As to the future, it is to be hoped that animal experimentation may give us:

1. A convenient, accurate, safe, and sure tuberculin treatment of tuberculosis.

2. The means of preventing cancer in a previously healthy individual.

3. The means of curing a patient already affected with cancer and of greatly reducing the incidence and mortality of this disease.

4. A reliable vaccine or serum treatment for typhoid, cholera, and dysentery.

These things lie in the immediate foreground of the future, but when we raise our eyes to the East where all things dawn, and catch the light of the rising sun on the faces of the watchers on the mountain tops, who can be sceptical, or who will stand in the way of more light?

---

# TRAUMATIC NEUROSES.

BY ARTHUR W. ROGERS, M. D.,

OCONOMOWOC, WIS.

Medical literature holds many illustrations of the unfortunate naming of a symptom complex described for the first time. We long since have come to appreciate the inadequacy of the term "exopthalmic goitre," since in the light of present knowledge of this disease we know that the condition designated by this term can exist without exopthalmus or goitre and a diagnosis be made even in the absence of both of these symptoms. No better illustration of the above statement however can be found in all medical literature than the term "railway spine."

In 1871 when Erichsen of London first called attention to the group of symptoms resulting from injuries received mainly upon railways he endeavored to establish a distinct disease entity and at the time it was thought that he had discovered a new disease. The terms Erichsen's disease, spinal concussion and railway spine were in turn names applied to this grouping of symptoms. In 1889 Oppenheim made a closer classification between organic injuries and those not marked by gross histological changes and proposed the term traumatic neurosis for the latter. About the same time or subsequently Charcot taught and demonstrated that the nervous symptoms in these cases varied from those attributable to organic lesions and were precisely the same as are presented in neurasthenia and hysteria.

The early errors of Erichsen and his associates are easily understood if it is recollected that the finer anatomy of the nervous system as well as the physiology of the cord was but little known in their time: that the electrical reactions of nerves and muscles were not clearly understood; that the stigmata of hysteria and the symptom group of neurasthenia were still undeciphered.

Unfortunately there was a tendency to dignify all the morbid conditions following serious injury by such terms as spinal concussion, railway spine, traumatic neurosis and Erichsen's Disease without any attempt to distinguish their real differences or to differentiate among them.

Many attempts have been made to intelligently define traumatic neurosis. The definition of Osler is compact yet covers the entire field, namely, "a morbid condition following shock, which presents the symptoms of neurasthenia or hysteria or of both." We observe from this definition that the earlier authors were mistaken in their belief that they had discovered a new disease entity and we now realize

that we are dealing with hysteria or neurasthenia or a combination of these two diseases the same in every respect and differing from the usual forms only in their etiology.

By way of illustration I wish to present the history and symptoms of a case of traumatic neurosis which recently came under my observation.

Widow, 64 years old, one child living at 30, married and in good health, one child born dead at term, no miscarriages. Parents both dead having lived to mature years. No points of special hereditary interest. Patient up to the time of her injury always had remarkably good health, was a practical nurse and up to the time of her present illness was practicing her profession, maintaining a home, taking care of an invalid husband, meeting all the expense of his sickness and death. She had always been considered a remarkably well-balanced woman and free from neurotic taint. April 10, 1909, while leaving a railway train she was thrown backward into the aisle by the sudden stopping of the train, causing a left Pott's fracture. Patient states she fell over a grip in the aisle striking the floor with the back of the head and lower spine. The attending physician states there were no bruises or signs of external injury other than those at the site of fracture. The fracture was properly treated and healed with good results. Since the injury however the patient has never left her bed except when helped and then only to sit up for a short time. At no time has she been able to place her entire weight on her left leg, the leg collapsing at the knee upon any effort to walk. During these months there has been a progressive loss of weight—in all over 40 lbs. Appetite has grown capricious, constipation is the rule, tongue has quite a heavy white fur, sleep is broken and unrefreshing and the patient has gradually grown nervous, irritable, fault-finding, and showing of late an impaired power for consecutive mental application. Immediately following the accident the patient on several occasions passed with her stool considerable bright red blood and at the time was running a temperature of 100° to 103°. This condition existed for about 14 days after the accident with recurring temperature of 100° to 103° as late as October. Has never had hemorrhoids.

She complains of almost a continuous dull pain in the right hypochondrium and shows marked tenderness along the lower border of the liver with diminishing area of liver dullness. She complains also of pain over the left trochanter. Upon pressure she shows marked tenderness over the lower dorsal and all the lumbar vertebrae. Moves and turns in bed with difficulty because of weakness and pain in the regions mentioned.

Upon examination I find a woman lying in bed with every appearance of being ill. No appreciable arterial changes, heart sounds clear and heart action good, pulse 81, tongue heavy yellow pasty coating, slightly tremulous, appetite capricious, constipated. Temperature by month 98.4°, pupils are normal with the exception of slight exaggeration of the reflexes, no arcus senilis. Vision almost lost in the left eye, reduced about 50 per cent in the left because of developing double

cataract. No special sensory disturbance beyond some diminution in the sense of touch. Measurements show no evidence of muscular atrophy, muscles soft and flabby, no evidence of muscular paralysis. With difficulty raised both legs from the bed when lying on her back, raised the right much more readily than the left and higher too. No special disturbance of special sense or temperature sense. The patellar reflexes somewhat increased. Achilles jerk increased, no ankle clonus, no Babinsky sign. The forearm and elbow jerks on each side slightly exaggerated. The epigastric and umbilical reflexes normal.

X-ray examination of the abdominal cavity showed contracted liver. Aside from reduced elimination the urine was normal. In conversation the patient is slow mentally, operations slow and comprehension slightly clouded. Is very much concerned over her condition, has given up all hope of recovery and is generally hypochondriacal in her mental attitude and conversation.

This patient was seen by me because litigation had been started with the idea of bringing suit against the corporation from which she received her injury and for the past two weeks patient had been subjected to numerous examinations by various physicians and to considerable strain through assisting her attorneys and family in arranging for her law suit. An additional complication in this case was brought about when the physician for the corporation called and succeeded in having patient sign her name to a paper for a settlement of her case. Patient had been thoroughly cautioned by her children not to do this. Her son-in-law succeeded in recovering the paper and destroying it and the corporation then threatened proceedings charging conspiracy—all of which has kept the patient in a state of considerable depression and mental agitation.

I have entered the history of this case at considerable length because in my opinion it is a classical case of traumatic neurosis with combined neurasthenic and hysterical symptoms. This case is of special interest because of the combined physical injury and trauma to the nerve centers. It is quite possible to have a typical traumatic neurosis without any apparent physical injury at the time of the accident. It is a well recognized fact that emotional strain and shock can and frequently do produce a psychosis as well as a neurosis. Some of you are familiar with the history of the railway locomotive engineer who ran over a child and from that time became a nervous wreck unable to support and maintain himself in any way, resulting from a true traumatic injury to his nerve centers.

I am well aware of the disposition on the part of certain members of our profession, particularly those gentlemen interested along surgical lines, to make light of this symptom-complex but I am confident that this attitude comes entirely from lack of experience or of the study of such cases. Osler states that "it must be borne in mind that in traumatic hysteria we are dealing with one of the most intractable affections which we as physicians are called upon to treat." Dr. Church states that "the profession should recognize that traumatic neuras-

thenia and traumatic hysteria are serious and disabling conditions." I could mention many other foreign and American authorities all of whom recognize this condition as a disease entity.

The diagnosis of traumatic neurosis is the most important feature of this condition. In no sickness is it more essential to make a most painstaking examination of the patient than in the one under consideration. The history of the patient from the time of birth up to the present moment should be carefully analyzed particularly with the idea of ascertaining neurotic or psycopathic tendencies prior to the time of injury. Then we must decide whether we are dealing with a neurosis or an organic lesion. If a neurosis, whether it can be traced directly to the injury or whether we are dealing with a case of malingering. After all has been said much depends upon the astuteness and experience of the examining physician in differentiating these various points.

Assuming that our examination has revealed no organic change, we will take it for granted that we have a neurosis and then if we are able to satisfy ourselves that the neurosis results directly from a shock or injury to the nervous centers either with or without some accompanying physical injury, how are we to decide whether we are dealing with a genuine neurosis or a case of malingering, because in the final analysis most of these cases must be decided between one or the other of these points. We are at once confronted with the embarrassing feature that in most of these cases all the symptoms are subjective. There are a few symptoms over which the patient has no control *e. g.* changes in the electrical reaction of muscles, clonic convulsions of some muscles, pupillary defects, marked trophic disturbances such as are seen in organic changes, considerable acceleration of the cardiac action, and a greater frequency of the pulse upon touching the painful pressure points. The malingerer is not usually hypochondriacal but is given to marked and simple exaggeration of his symptoms. By carefully and persistently going over pressure points it is possible to confuse the malingerer, *e. g.* in examining the pressure points over the spinal vertebrae and marking them as the patient complains of pain, we may find that his statements differ at the time of each examination and during the same examination. The malingerer too has a tendency to change his symptoms from time to time. Usually he has every ache and pain at every point suggested by the examiner or questioner and is more concerned in the litigation than in his own condition. In cases where paralysis of one of the lower extremities is claimed we can decide between an actual paralysis if we ask the patient to raise the well leg from the bed. In so doing where the paralysis is assumed or hysterical in origin the other leg

will become tense and press against the bed. In organic lesions this condition is absent.

So far as the prognosis of this condition goes it is safe to state that the majority of patients recover. Traumatic neuroses with pure hysterical symptoms in this country are rare and where they exist are the most discouraging so far as the outcome is concerned. A considerable percentage of these cases recover fairly speedily after a favorable settlement of their case in court. This has been one of the leading arguments of those gentlemen who are inclined to believe that all these cases are malingerers. It does not take much thought or consideration, I believe, to appreciate the effect of the wear and strain to an individual who has sustained a severe physical and psychical shock, of the added injury resulting from frequent examination and discussion on the part of physicians and attorneys and the anxiety accompanying the outcome of the case. This in itself in some of these cases might produce a neurasthenic condition. Some of these cases however never recover but leave their victims chronic invalids for life and in some few melancholia, dementia and occasionally progressive paresis develop.

A clearer comprehension of these cases on the part of the attending physician will frequently assist him in making it possible to prevent the development of unfavorable symptoms. If the physician is satisfied in his own mind that it is his duty to heal his patient he oftentimes can distract him and direct his thoughts away from his condition and prevent the developing of hypochondriacal tendencies and gradually get him up and about, not permitting him to magnify his ailments or symptoms in general. By careful and full examination, which alone often quiets a nervous patient and by telling him not to fear any further consequences, the physician may often relieve the mind of the injured person and at the same time counteract the psychical shock which the patient has suffered by showing that he regards the accident as of slight importance and a small matter. Furthermore if possible the physician should attribute the nervous disturbance resulting from the accident to some other cause. Inability to work should be spoken of as merely temperary so that if possible the patient's anxiety for the future shall be at once allayed.

Where the disease has become developed the treatment resolves itself into the treatment for neurasthenia, hysteria, hypochondria from other causes and is usually mostly of a suggestive nature.

---

ANNUAL AUTOMOBILE RUN OF THE CALUMET COUNTY MEDICAL SOCIETY. WAUPUN, JULY 27, 1911.

# WISCONSIN MEDICAL JOURNAL

OFFICIAL PUBLICATION OF THE STATE MEDICAL SOCIETY OF WISCONSIN.

A. W. MYERS, M. D., Editor.
141 Wisconsin Street, Milwaukee.

J. P. McMAHON, M. D., Managing Editor.
141 Wisconsin Street.



Publication Committee:

A. J. Patek, M. D., Milwaukee. G. E. Seaman, M. D., Milwaukee
O. H. Foerster, M. D., Milwaukee. C. S. Sheldon, M. D., Madison.
S. S. Hall, M. D., Ripon.

Collaborators:

The Council.

M. R. Wilkinson.....Oconomowoc
G. Windesheim.....Kenosha
F. T. Nye.....Beloit
W. Cunningham.....Platteville
J. V. Mears.....Fond du Lac
H. W. Abraham.....Appleton
Edward Evans.....La Crosse
T. J. Redelings.....Marinette
O. T. Hougen.....Grand Rapids
R. U. Cairns.....River Falls
J. M. Dodd.....Ashland
H. E. Dearholt.....Milwaukee



Annual Subscription. - - - $2.00. Single Copies, - - - - - $0.20

Address all business communications to
WISCONSIN MEDICAL JOURNAL,
504 Goldsmith Building, Milwaukee

[Entered as second class matter, June 30th, 1903, at the Post Office at Milwaukee, Wis., under Act of Congress, March 3rd, 1879.]

Vol. X. AUGUST, 1911. No. 3


## EDITORIAL COMMENT.

### DIAGNOSIS OF TUBERCULOSIS BY SPUTUM EXAMINATION.

The discovery of the tubercle bacillus by Robert Koch was justly hailed as one of the great triumphs of medicine. The diagnosis of the disease was now considered an easy matter. All were eager to learn the methods. At the present day practically every city of any size throughout our country has a laboratory in which the examination of sputum for tubercle bacilli is one of the prominent features.

With more than twenty years experience it may be well to look back and see what has been accomplished. Every professor of medicine teaches that finding of the tubercle bacillus in sputum is a positive diagnosis of tuberculosis, and in the profession it is a widespread opinion that this is the diagnosis which must be depended on. The laity too, have been educated up to this. It cannot be denied that the

finding of the bacilli makes the diagnosis positive. It is, however, a great and fatal mistake for any physician to withhold a diagnosis until bacilli are found in the sputum, or to depend on this manner of diagnosis.

When the tubercle bacillus gains lodgment in the lung a small nodule or tubercle is formed. This increases in size and the multiplication of tubercle bacilli goes on within it. The blood supply is finally cut off and caseation takes place. In favorable cases the little tubercle is surrounded by a capsule and no further harm results. In ordinary cases, however, a secondary infection takes place. The result is a softening of the tubercle with the formation of a minute abscess which sooner or later finds its way into a bronchial tube, is thrown out in the sputum, and for the first time tubercle bacilli appear in the sputum. It is perfectly plain, however, that considered from the standpoint of the tubercle the disease can no longer be considered as in the incipient stage. The individual tubercle has completed its life history. Many a patient has gone to his grave because the attending physician has waited to make his diagnosis through the finding of tubercle bacilli in the sputum. While sputum examination has done much good, the dependence upon it which is so universal amongst physicians has done an enormous amount of harm. Physicians should become expert in physical examination, and make their diagnosis long before tubercle bacilli are found in the sputum. It is difficult to speak too strongly against the prevailing idea that one must wait for the finding of tubercle bacilli before making a diagnosis of tuberculosis. During the delay the disease is progressing, precious time is lost, and death often ends the case when an early diagnosis would have meant recovery.

## THE PHYSICIAN AND TUBERCULOSIS.

In the discussion of the subject of the "Relation of the Physician to the Public Campaign Against Tuberculosis" at the last meeting of the State Medical Society a great deal was said about the failure of the medical profession to properly instruct tuberculous patients and their families in regard to the modes of transmission of tuberculosis, its dangers, and the best means of preventing its dissemination. Some of the speakers said that they were in the habit of giving their patients books or leaflets of instruction on these subjects, while Dr. Cabot urged very strongly the need of detailed personal instruction by the physician himself.

If we stop for a moment to put ourselves in the position of the patient we shall probably agree that a combination of these methods

is necessary. A book or leaflet of instruction seems almost indispensable because no ordinary patient can be expected to remember all the details which would be new to him, even though they might seem matters of every day routine to the medical man; on the other hand the personal instruction by the physician, explaining the need for the rules and the dangers from breaking them, would seem no less indispensable.

It is true that a number of books and leaflets of instruction have been published by various agencies. The Modern Woodmen of America have published a very good little booklet of instructions on the care and prevention of consumption; The Metropolitan Life Insurance Company of New York has issued a splendid pamphlet on "Directions for Living and Sleeping in the Open Air." Many others might be mentioned, and yet the perfect book remains to be written.

Would it not be a splendid work for the Committee on Tuberculosis of the State Medical Society to undertake the writing or editing of a series of leaflets covering the necessary ground a little better than has ever been done before?

If the practitioners of the state could be supplied with these at a low cost it would go far in the direction of relieving the profession of the reproach of inadequate instruction which now cannot be called wholly undeserved.

## PROPHYLACTIC VACCINATION AND VACCINE TREATMENT OF TYPHOID FEVER.

We are not so optimistic as to believe that we shall see the day when there will be no typhoid fever in our midst. Civic consciences are not everywhere aroused, and as long as there are places where sanitary regulations are lax and water supplies for drinking purposes polluted, typhoid fever will exist and materially add to the county's death roll.

We can truly say of medicine that there is no standing still. The past few years have witnessed wonderful advances in our knowledge of diseased conditions and in methods of treatment. The way for vaccine therapy was blazed by Pasteur with his inoculation for chicken cholera with attenuated cultures of the specific bacillus. To Sir A. E. Wright also belongs much credit for his work on the treatment of disease by injecting minute doses of bacterial products at definite intervals. Since this work much has been done not only in chronic and subacute diseases where the antitoxic or bactericidal functions of the body needed stimulation, but also in acute disease at times when the toxins produced by invading microorganisms were

filtering into the tissues slowly and an overwhelming production of antibodies seemed essential in order to neutralize the toxins or kill the bacteria.

Vaccines are applicable wherever there is a culturable bacterium producing a disease. *A priori* it would seem that vaccines would find their greatest use in subacute and chronic conditions. In acute diseases the body appears to be already overwhelmed by poisonous products of bacterial growth so that the addition of more poison in the form of vaccine does not seem rational. In spite of the theoretical objections vaccines are employed in the treatment of many acute diseases, the most recent application being in typhoid fever.

Quite a number of publications have appeared within the past three years dealing with the vaccine treatment of typhoid fever. J. G. Callison in a recent article has reviewed some of the literature and reports 24 cases treated with vaccine. There can be no question of the value of prophylactic inoculation in the prevention of typhoid. The English have inoculated thousands of troops and have demonstrated the immense value of vaccination in the camp and field. The wanton sacrifice of life from typhoid fever in the camps during the Spanish-American war is common knowledge. It puffs our pride somewhat then to know that we have recently encamped 18,000 vaccinated troops near the Mexican border where every natural facility for the development of typhoid fever existed, and yet in two months only one case developed—and that was in an unvaccinated teamster.

From time to time nurses and doctors in our hospitals who care for many cases of typhoid fever contract typhoid by contact. A field is here opened for the use of preventive inoculation and some results have already been obtained at the Massachusetts General Hospital by M. W. Richardson and L. H. Spooner.

Callison suggests the use of vaccines in rural communities and for those who spend summers at popular resorts. The immunization consists of three injections of killed cultures of typhoid bacilli (dose 500,000,000 to 1,000,000,000 bacilli) at intervals of ten days. There is practically always a decided febrile reaction and the person who is inoculated is at times quite ill. However the slight discomfort attending upon the vaccination is nothing compared to an attack of typhoid fever. It is not known how long the immunity lasts. Time alone can settle this question.

As far as the treatment of typhoid fever with vaccine is concerned, Callison is rather enthusiastic. Others who have reported six to twelve cases treated with vaccine without a death, are also much in favor of it. Callison has collected 323 cases from the literature. There were

17 deaths (5.2 per cent) and 18 relapses (5.6 per cent). That this is a good showing, no one will deny. But the reports were made up of small groups of more or less selected cases, no reporter recording over 34 cases. The excellent appearance of the patients described by some enthusiasts is no more than can be seen in patients who are fed rationally throughout the course of the disease. We confess that we take *cum grano salis* much of the eulogy which has been lavished upon the vaccine treatment of typhoid fever.

There is this to be strongly emphasized, however: It has not seemed to be productive of harm. Therefore we should suspend judgment until more reports of larger series of cases are published, and even ourselves use the method as often as possible.

We believe in a well balanced skepticism with regard to all new methods. This vaccine treatment of typhoid fever is not to be discarded off-hand nor is it to be used and urged indiscriminately. We ourselves shall try it out and hope later to be able to speak from personal experience concerning the value of the treatment.—L. M. W.

## A GOOD IDEA FOR COUNTY SOCIETIES.

On another page will be found a picture of the "Annual Automobile Run" of the Calumet County Medical Society on July 27, 1911.

The Head Booster writes: "The Calumet men think there is nothing like it. This is their second venture, last year having gone around Lake Winnebago. Enough physicians in almost any society now have machines to accommodate the membership by asking their less fortunate neighbors. As you will see the wife and sweetheart are taken along."

The picture shows the arrival at the State Prison. It should be distinctly understood that the Head Booster lives there because he likes it, not because the courts compel it. There are several interesting features about the picture, one is that all the Calumet county doctors are outside the walls, another that they have very good looking automobiles, and still another that very few of them seem to be lonesome.

## NEWS ITEMS AND PERSONALS.

**Dr. George M. Henbest,** Appleton, on July 26th, filed a petition in bankruptcy.

**Dr. J. B. McNaughton,** Waupaca, has been appointed health commissioner of that city.

**Dr. H. O. Delaney,** Beloit, fractured his knee while attempting to crank his automobile.

**Dr. J. P. Allen,** Beloit, sustained a broken wrist while cranking his automobile, on July 24th.

**The Association of Military Surgeons** will meet in convention in Milwaukee, September 26 to 29.

Plans for a hospital, to be known as the Simpson Memorial Hospital at Burlington, have been completed.

**Dr. W. W. Cassidy,** Durand, who underwent an operation at Chicago, is convalescing and has returned to his home.

**Dr. George R. Ernst,** Milwaukee, has been appointed superintendent of municipal institutions for the treatment of tuberculosis, at a salary of $2,500 a year.

**Dr. G. L. Bellis,** Antigo, has been appointed a member of the advisory board of the Wisconsin Tuberculosis Sanitorium. He succeeds Dr. Colton of Marinette.

**Dr. J. V. Lyman,** Eau Claire, was injured on July 27th, when his automobile collided with a street car. He sustained two fractured ribs and was cut and bruised.

The fifth annual meeting of the **Minneapolis, St. Paul & Sault Ste. Marie Surgical Association** will be held in Chicago, at The Blackstone, October 16 and 17, 1911.

J. H. Rishmiller, *Secretary.*

**Removals,** Dr. O. G. Wulfrum, Antigo to Chicago.
Dr. F. L. Crikelair, Hollandale to Green Bay.
Dr. S. W. Forbush, Waterloo to Orfordville.
Dr. W. S. Cary, Darlington to Erick, Okla.
Dr. A. L. Allen, Rib Lake to La Crosse.
Dr. S. J. Phaneuf, Weyerhauser to Sommerset.
Dr. A. J. Wiesender, Racine Junction to Green Lake.
Dr. C. G. Dwight, Janesville to Madison.
Dr. S. E. Hutchins, Independence to Trempealeau.
Dr. L. A. Vanderlinde, Wild Rose has disposed of his practice to Dr. C. M. Anderson, Dassel, and contemplates locating in Texas.

**Deaths.** Dr. George Pollock, of Boone, Iowa, a former well known physican of Racine, dropped dead of heart failure, caused by over-exertion, while cranking his automobile.

Dr. A. B. Manley of Shopiere, died on July 27th, at the Beloit Hospital. Peritonitis, following an operation for appendicitis, was the cause of death.

Dr. Manley was born in Manchester, Ill., March 2, 1850. He attended Beloit College and graduated with the class of 1874. He afterwards attended Rush Medical College, Chicago, where he received his degree. After finishing his medical course Dr. Manley located in Shopiere, where he practiced medicine for thirty-two years.

He was a member of the State Medical Society of Wisconsin.

Dr. H. B. Newell, Waterford, died at his home on August 2, of hemorrhage of the brain.

Henry Boyd Newell was born at Waterford on February 16, 1845. His father, Dr. G. F. Newell, was a pioneer physician. Dr. Newell received his education in the public schools, the Rochester Seminary, and the High School at Mygatt's Corners. He then took up the study of medicine and graduated from Rush Medical College in 1867. He had practiced at Waterford 46 years.

Dr. Guy A. Grafton, Hayward, a prominent physician of northern Wisconsin and formerly of Winona, Minnesota died on Aug. 10, 1911, at St. Joseph's Hospital, Ashland, as the result of an automobile accident, in which he broke his left thigh. As a result of the traumatism acute Bright's disease followed.

Dr. Grafton was born at Winona, Minnesota, November 20, 1876. He graduated from the University of Minnesota in 1899 and has been located at Hayward for the past nine years.

Dr. Grafton was highly esteemed and enjoyed a lucrative practice in the community where he lived. He was a member of the County and State Medical Societies and of the American Medical Association.

## THE STATE BOARD OF MEDICAL EXAMINERS.

The governor has announced the following appointments to the Wisconsin State Board of Medical Examiners: Dr. Henry W. Abraham, Appleton, successor to Dr. Lewis F. Bennett, Beloit; Dr. F. Gregory Connell, Oshkosh, successor to Dr. William T. Sarles, Sparta, and Dr. George H. Ripley, Kenosha, successor to Dr. Adellon P. Andrus, Ashland. The board at its meeting in Milwaukee elected the following officers: Dr. Milton A. Barndt, Milwaukee, president; Dr. John M. Beffel, Milwaukee, secretary-treasurer; and the following committees were elected: auditing committee, Drs. William L. Thompson, Milwaukee; Charles W. Rodecker, Wonewoc, and F. Gregory Connell, Oshkosh; committee on local medical schools, Drs. Abner B. Bailey, Fennimore; John M. Beffel, Milwaukee, and George H. Ripley, Kenosha; committee on foreign colleges and departments, Drs. Milton A. Barndt, Milwaukee; Henry W. Abraham, Appleton, and F. Gregory Connell, Oshkosh; committee on midwives, Drs. Charles W. Rodecker, Wonewoc; John M. Beffel, Milwaukee, and George H. Ripley, Kenosha; and committee on reciprocity, Drs. Abner B. Bailey, Fennimore; Henry W. Abraham, Appleton; George H. Ripley, Kenosha, and William L. Thompson, Milwaukee.

At a meeting of the Board held at Madison, July 11-13, 1911, it was decided that hereafter the board will demand documentary evidence of preliminary education in the form either of a high school diploma or a certificate signed by the proper examiner for the state from which the applicant comes showing that he has an equivalent education. Furthermore, the board will require that hereafter all conditions must be made up before the student is admitted to the junior year.

Probably the most important step taken by the board was the resolution providing that in all examinations hereafter practical tests will be required in physical diagnosis, chemical and microscopic urinalysis, bacteriology, pathology, histology and practical anatomy. It is the belief of the board that practical examinations will more clearly demonstrate the real knowledge possessed by the applicant, of the fundamental problems of medicine.

## PROGRAM AMERICAN ASSOCIATION OF CLINICAL RESEARCH.

THIRD ANNUAL MEETING, SEPTEMBER 27 AND 28, 1911.

DAY SESSIONS.

Wednesday, September 27, 1911, from 10 a. m. to 1 p. m., and 3 p. m. to 6 p. m.

Thursday, September 28, 1911, from 10 a. m. to 1 p. m., and 3 p. m. to 6 p. m.

1. Call to order. Opening Address by the President. Alvin Roy Peebles, M. D., Boulder, Colorado.
2. Reading of Records. Report of the Secretary and Treasurer.
3. Election of Officers: Appointment of Committee for Nominations.
4. Resolution on the Formation of Centres of Research.
5. Cancer Statistics and Their Meaning. Ira S. Wile, M. D., New York, New York.
6. Intracellular Pathology of Cancer. Frederick Gaertner, M. D., Pittsburg, Pennsylvania.
7. Cancer Metabolism. Henry R. Harrower, M. D., Chicago, Illinois.
8. The Latest Research Work on Sepsis. Charles H. Duncan, M. D., New York, New York.
9. Further Observations of the Action of Some Heart Stimulants. F. C. Askenstedt, M. D., Louisville, Kentucky.
10. The Mechanical Treatment of Intestinal Diseases. Dr. R. K. Smith, Boston, Massacnusetts.
11. Fecal Examination. C. R. Gilman, M. D., Boston, Massachusetts.
12. Disease Conditions Expressive of Correct Diagnosis. James Krauss, M. D., Boston, Massachusetts.
13. a. Corrugated Finger Nails: A New Disease of the Integument.
    b. Artificially Active Immunity to Spermatozoon or Productive Sterility.
    c. Can Eclampsia be prevented? Report of a case. Leonard Keene Hirschberg, M. D., Baltimore, Maryland.
14. Leucaemia. Sophus Boolsen, M. D., Oakland, California.
15. The Tuberculosis Problem: Diagnostic, Prophylactic, Therapeutic. Joseph P. Cobb, M. D., Chicago, Illinois.

16. An Unusual Case. Further Investigations in Psychic Diagnosis. Presentation of Psychic Subject in Person. Wesley H. Ketchum, M. D., Hopkinsville, Kentucky.

17. Therapeutics from the Standpoint of a Student of Specific Drug Action. Finley Ellingwood, M. D., Chicago, Illinois.

18. Other Papers and Reports.

EVENING SESSION.

Wednesday, September 27, 1911, at 8 p. m.

This session is open to the public in accordance with Article V of the By-Laws.

Members are urged to invite their medical and lay friends, both ladies and gentlemen.

1. The Cancer Problem: Its Experimental Therapy and Diagnosis. Alvin Roy Peebles, M. D., Boulder, Colorado.

2. Some Imperative Problems of Medicine. James Krauss, M. D., Boston, Massachusetts.

3. Radio-active Triturations: Theory of Action. Therapeutics. Lantern Slides. Frank H. Blackmarr, M. D., Chicago, Illinois.

THURSDAY EVENING, SEPTEMBER 28, 1911.

Dinner for members of the American Association of Clinical Research.

All papers and communications are the property of the Association and must be left with the Secretary for publication with the transactions.

Application blanks for membership may be obtained from the Secretary.

JAMES KRAUSS, M. D., *Secretary*.
419 Boylston Street, Boston Massachusetts.

---

**Gonorrhea in the Male—A Practical Guide to its Treatment.** By A. L. WOLBARST, M. D. Cloth. pp. 175, price $1.50. Published by The International Journal of Surgery Co., New York, 1911.

This small book has been written for the use of the general practitioner, the man who treats vastly more acute gonorrhea than does the specialist, and the Author has repeatedly pointed out one of the two chief mistakes—a too vigorous treatment—which is commonly made. The other frequent mistake made is the failure to recognize a positive gonorrhea or some of its complications when they exist and this fact has not been sufficiently emphasized, though the directions for detecting and treating these conditions are very clear and concise.

If the treatment advised in the above manual was adopted by the rank and file of physicians the number of chronic gonorrheics going from one office to another for relief and despairing of ever becoming well, would be greatly diminished. E. A. F.

# THE STATE MEDICAL SOCIETY OF WISCONSIN.

ORGANIZED 1841

## Officers 1911-1912.

J. M. DODD, Ashland, President.

T. J. Redelings, Marinette, 1st Vice-President.

C. A. Armstrong, Boscobel, 2d Vice-President.

H. E. Dearholt, Milwaukee, 3rd Vice-President.

CHAS. S. SHELDON, Madison, Secretary.

S. S. HALL, Ripon, Treasurer.

ROCK SLEYSTER, Waupun, Assistant Secretary.

## Councilors.

TERM EXPIRES 1917.

1st Dist., M. R. Wilkinson, - Oconomowoc
2nd Dist., G. Windesheim, - - Kenosha

TERM EXPIRES 1912.

3rd Dist., F. T. Nye, - - - - Beloit
4th Dist., W. Cunningham, - - Platteville

TERM EXPIRES 1913.

5th Dist., J. V. Mears, - - Fond du Lac
6th Dist., H. W. Abraham, - - Appleton

TERM EXPIRES 1914.

7th Dist., Edward Evans, - - La Crosse
8th Dist., T. J. Redelings, - - Marinette

TERM EXPIRES 1915.

9th Dist., O. T. Hougen, - - Grand Rapids
10th Dist., R. U. Cairns, - - River Falls

TERM EXPIRES 1916.

11th Dist., J. M. Dodd, - - - Ashland
12th Dist., H. E. Dearholt, - Milwaukee

## Delegates to American Medical Association.

L. F. Bennett, Beloit. C. S. Sheldon, Madison. A. H. Levings, Milwaukee.

## Alternates.

F. S. Wiley, Fond du Lac. Wilson Cunningham, Platteville. R. G. Sayle, Milwaukee.

## Committee on Public Policy and Legislation.

A. W. Gray, Milwaukee, Chairman. J. P. McMahon, Milwaukee. F. F. Bowman, Madison.

## Committee on Medical Defense.

G. E. Seaman, Milwaukee, Chairman. S. S. Hall, Ripon. A. J. Patek, Milwaukee, Sec'y.

## Committee on Prevention of Tuberculosis.

C. A. Harper, Madison. G. E. Seaman, Milwaukee. M. P. Ravenel, Madison.
J. M. Beffel, Milwaukee. C. H. Stoddard, Milwaukee.

## Program Committee.

A. W. Gray, Milwaukee, Chairman.

## NEXT ANNUAL SESSION, WAUSAU, 1912.

The Wisconsin Medical Journal, Official Publication.

## LIST OF EXECUTIVE OFFICERS OF COUNTY MEDICAL SOCIETIES.

| County. | President. | Secretary. |
|---|---|---|
| Ashland-Bayfield-Iron | J. M. Meyers, Odanah | J. M. Dodd, Ashland. |
| Barron-Polk-Washburn-Sawyer-Burnett | H. B. Crommett, Amery | I. G. Babcock, Cumberland. |
| Brown-Kewaunee | R. C. Buchanan, Green Bay | T. J. Oliver, Green Bay. |
| Calumet | F. P. Knauf, Kiel | J. A. Schmidt, Brillion. |
| Chippewa | A. W. Wilmarth, Chippewa Falls | A. L. Beier, Chippewa Falls. |
| Clark | H. H. Christofferson, Colby | E. L. Bradbury, Neillsville. |
| Columbia | B. C. Meacher, Portage | A. J. Batty, Portage. |
| Crawford | A. E. Dillman, Steuben | A. J. McDowell, Soldiers Grove. |
| Dane | G. H. Keenan, Madison | T. W. Tormey, Madison. |
| Dodge | A. E. Bachhuber, Mayville | C. G. Schwalback, Juneau. |
| Door | | |
| Douglas | F. J. Johnson, Iron River | R. K. Lohmiller, Superior. |
| Dunn-Pepin | A. F. Heising, Menomonie | B. J. Steves, Menomonie. |
| Eau Claire | H. A. Fulton, Eau Claire | E. L. Mason, Eau Claire. |

| County. | President. | Secretary. |
|---|---|---|
| Fond du Lac | G. T. McDougall, Fond du Lac | F. A. Read, Fond du Lac. |
| Grant | C. R. Pickeriug, Muscooa | M. B. Glasier, Bloomington. |
| Green | L. A. Moore, Monroe | G. S. Darby, Brodhead. |
| Green Lake-Waushara-Adams | G. E. Baldwin, Green Lake | R. H. Buckland, Green Lake. |
| Iowa | W. S. Lincoln, Dodgeville | W. M. Gratiot, Mineral Point. |
| Jefferson | James Cox, Jefferson | C. R. Feld, Watertown. |
| Juneau | E. H. Townseud, New Lisbon | A. T. Gregory, Elroy. |
| Kenosha | W. M. Farr, Kenosha | J. H. Cleary, Kenosha. |
| La Crosse | C. H. Marquardt, La Crosse | M. W. Dvorak, La Crosse. |
| La Fayette | O. L. Hansen, Argyle | C. O. Latham, Darlington. |
| Langlade | M. J. Donohue, Antigo | J. C. Wright, Antigo. |
| Lincoln | C. C. Walsh, Merrill | Herbert Saylor, Merrill. |
| Manitowoc | J. R. Currens, Two Rivers | A. J. Shimek, Manitowoc. |
| Marathon | L. M. Willard, Wausau | Emile Roy, Wausau. |
| Marinette-Florence | H. F. Schroeder, Marinette | M. D. Bird, Marinette. |
| Milwaukee-Ozaukee | A. J. Patek, Milwaukee | Daniel Hopkinson, Milwaukee. |
| Monroe | C. H. Cremer, Cashton | A. R. Bell, Tomah. |
| Oconto | J. B. Atwood, Oconto | R. C. Faulds, Abrams. |
| Oneida-Forest-Vilas | J. M. Hogan, Oshkosh | C. A. Richards, Rhinelander. |
| Outagamie | V. F. Marshall, Appleton | J. P. Dohearty, Appleton. |
| Pierce | E. R. Halliday, Ellsworth | S. F. Rudolf, Ellsworth. |
| Portage | J. D. Lindores, Stevens Point | W. F. Cowan, Stevens Point. |
| Price-Taylor | C. E. Nystrum, Medford | G. H. McClure, Westboro. |
| Racine | E. A. Taylor, Racine | Susan Jones, Racine. |
| Richland | P. G. Lasche, Ithaca | A. D. Campbell, Richland Center. |
| Rock | G. W. Fifield, Janesville | E. B. Brown, Beloit. |
| Rusk | G. M. Carnahan, Bruce | W. F. O'Connor, Ladysmith. |
| Sauk | | Roger Cahoon, Baraboo. |
| Shawano | E. Puckner, Wittenberg | J. B. Gordon, Shawano. |
| Sheboygan | Edward Felter, Plymouth | W. F. Zierath, Sheboygan. |
| St. Croix | O. H. Epley, New Richmond | Boyd Williams, Hudson. |
| Trempealeau-Jackson-Buffalo | C. F. Peterson, Independence | H. A. Jegi, Galesville. |
| Vernon | John Schee, Westby | F. E. Morley, Viroqua. |
| Walworth | R. E. Rugh, Lake Geneva | M. V. Dewire, Sharon. |
| Washington | F. P. Leich, Jackson | S. J. Driessel, Barton. |
| Waukesha | J. H. Voge, Oconomowoc | R. E. Davies, Waukesha |
| Waupaca | T. E. Loone, Iola | G. T. Dawley, New London. |
| Winnebago | B. C. Gudden, Oshkosh | W. L. Herner, Winnebago. |
| Wood | J. C. Hayward, Marshfield | J. B. Vedder, Marshfield. |

---

## SOCIETY PROCEEDINGS.

### BRAINARD MEDICAL SOCIETY.

At the annual meeting of the Brainard Medical Society, held on July 19th, the following officers were elected:

President—N. Edward Hausmann.

Vice-President—Philip Rogers.

Secretary—S. B. Aekley.

Censor—Henry Blank.

### CALUMET COUNTY MEDICAL SOCIETY.

The Calumet County Medical Society held their annual automobile run on July 27th. After the meeting at Calumet Harbor the members proceeded to Waupun where a lunch was served, after which the State Prison was inspected under the guidance of Dr. L. R. Sleyster, prison physician.

## JEFFERSON COUNTY MEDICAL SOCIETY.

The Jefferson County Medical Society held its annual meeting at the summer home of Dr. W. A. Engsberg, at Lake Mills. Supper was served to the visiting physicians. The occasion was a profitable and enjoyable one both professionally and socially.

## KENOSHA COUNTY MEDICAL SOCIETY.

The last regular meeting of the Kenosha County Medical Society was held July 13, 1911, at the home of Dr. Windesheim, with 15 members present.

The program of the evening consisted of a thorough and excellent paper on the *Diarrheas of Infants* by Dr. C. R. Caughey, and a paper on *Chronic Constipation* by Dr. G. F. Adams, both of which were freely discussed.

Dr. G. Belting of Somers was elected a member of the Society. After adjournment the proceedings were in charge of Mrs. Windesheim, to whose hospitality ample testimony was rendered.

J. H. Cleary, M. D., *Secretary.*

## NINTH COUNCILOR DISTRICT MEDICAL SOCIETY.

The summer meeting of the Ninth Councilor District Medical Society was held at the Crooked Rift Club House, Grand Rapids, Wis.

Program: *Diagnosis.* Dr. V. A. Mason, Grand Rapids.

*Rupture of Abdominal Viscera without External Injury.* Dr. Jos. F. Smith, Wausau.

*Salvarsan.* Dr. O. H. Foerster, Milwaukee.

---

**Symptomatic and Regional Therapeutics.** By George Howard Hoxie, M. D. D. Appleton and Co., New York and London.

The multiplicity of books which have appeared recently devoted to the treatment of disease, indicates both a need and a demand. That there is need of fuller, more definite and more detailed descriptions of the measures which may be used in the alleviation of symptoms and the treatment of disease may be said without belittling the ordinary treatise on medicine.

In this volume the treatment of prominent symptoms, such as pain, fever, constipation, local inflammations, etc., and of diseases is given in different parts of the book so that there is necessarily considerable repetition; in addition, in the consideration of diseases, either further repetitions, or reference to other parts of the volume are needed more ferquently than they appear.

The discussion of local measures, such as lavage, proctolysis, the application of baths and of poultices is intended to be fairly complete. Much, however, is wanting in the treatment of diseases, both in the omission of valuable procedures and in the inclusion of those of doubtful propriety. Nearly two hundred of the five hundred pages of the volume are devoted to a not-very-helpful consideration of materia medica, which, we may hope, would not be wanting in the library of any physician were it omitted here. We consider, therefore, that however much we may have been longing for just the right volume on the treatment of disease we have not found it in the one before us.—G. W M.

## THE ASSOCIATION OF
## COUNTY SECRETARIES AND STATE OFFICERS
## OF THE STATE MEDICAL SOCIETY OF WISCONSIN.

W. F. ZIERATH, M. D., Sheboygan
President.

M. V. DEWIRE, M. D., Sharon
Vice-President.

ROCK SLEYSTER, M. D., Waupun, Secretary.

NEXT ANNUAL SESSION, WAUSAU, 1912.

**Under this heading will be published each month, papers, editorials, sermons, reports of meetings and all that relates to the County Medical Societies of the state. To it all are invited and asked to contribute, especially the County Secretary. It is yours—make good use of it, and may it he of help to every County Society. It will he edited hy Rock Sleyster of Waupun, secretary of the new association, to whom all communications for this department, reports of meetings and news matter should be addressed.**

### ROSTER OF ATTENDANCE, SECOND ANNUAL MEETING OF THE ASSOCIATION OF COUNTY SECRETARIES AND STATE OFFICERS, WAUKESHA, JUNE 6, 1911.

R. H. Buckland, Green Lake; M. V. Dewire, Sharon; J. C. Wright, Antigo; J. H. Cleary, Kenosha; A. Egdahl, Menomonie; H. W. Abraham, Appleton; G. T. Dawley, New London; C. H. Gebhart, Kenosha; H. A. Jegi, Galesville; C. H. Armstrong, Boscobel; Rock Sleyster, Waupun; J. M. Dodd, Ashland; E. B. Brown, Beloit; R. E. Davis, Waukesha; Wilson Cunningham, Platteville; Hoyt E. Dearholt, Milwaukee; R. C. Faulds, Abrams; W. F. Zeirath, Sheboygan; G. Windesheim, Kenosha; Alex. R. Craig, Chicago; L. Bennett, Ft. Atkinson; W. T. Clark, Ft. Atkinson; S. S. Hall, Ripon; G. E. Peterson, Waukesha; W. B. Hill, Milwaukee; Dan'l Hopkinson, Milwaukee; C. S. Sheldon, Madison, W. M. Gratiot, Mineral Point; T. J. Redelings, Marinette; Byron M. Caples, Waukesha; W. T. Sarles, Sparta; A. T. Gregory, Elroy; A. J. Dreissel, Barton; F. C. Ewins, Waukesha; W. T. Murphy, Waukesha.

## THE COUNTY SECRETARY AS A PEACE MAKER.*

BY A. T. GREGORY, M. D.,

ELROY, WIS.

When invited to write a paper on this subject my first thought was how much could be said; but upon a closer study of the subject, I came to the conclusion how little can be said. In this brief discus-

*Read at the 2nd Annual Meeting of The Association of County Secretaries and State Officers, Waukesha, June 6, 1911.

sion I will not attempt the task of formulating in words all the duties of the secretary as a peace maker. Some are naturally on the surface and do not need any analysis; while others are more deeply seated and require special mention.

The work of the secretary as a peace maker is varied and involves a multitude of intrinsic duties. There are innumerable and perplexing problems that require solution; problems that require skill, tact and judgment; problems that have baffled the most experienced and wisest of counselors.

The secretary's personality should be of a peculiar character and he should be endowed with fitting qualities for the office. I prefer to join the qualities of sympathy and loyalty under the one quality—character. He cannot, if he would, avoid responsibility. He should be an accurate observer, his senses must be trained, quick to recognize and discriminate, a reader of human nature and endowed with a most convincing and persuasive magnetism. When called upon to settle disputed questions or injured feelings within the membership or among the profession in general, he must by tact and judgment convince them of their imaginary wrongs and grievances and keep peace and good will among the members.

Should some member so far digress from the code of ethics as to injure the character of others, it is the duty of the secretary as a peace maker, to see that the offending brother atones for his offences. Be alert and active, do not pour oil on an already kindled fire, but by counsel and advice convince the offended brother that he sees his grievances in the wrong light, and thus banish strife and discord from within the society walls, and avoid producing sore and tender spots upon the members.

Emphasize the fact, that to keep peace and good will among the members of the society and profession in general, every up to date physician of good moral character (and all should be) who keeps abreast with the times, should affiliate himself with both county and state societies. Impress upon him, when these are gained, that he should seek others of national character, which will be a source of inspiration and will be the means of gaining closer friendships.

Endeavor to keep him interested in society work, for as soon as interest is lost he becomes dissatisfied and discouraged, discord and strife creep in among the members, and sooner or later one by one they drop out.

Convince them that on their work, co-operation and attendance, the life, good will and prosperity of the society depends and by so doing you will keep peace and good fellowship among the members.

The social feature of the society meetings is an important one, and should include the ladies, as they contribute largely to the social function of most affairs.

In order to retain the interest of a body of men we must provide for their social welfare, which serves to relieve their minds from their daily tasks. The needs of social features in the meetings, become more apparent year by year and without them we cannot expect to gain unity, good fellowship and co-operation.

I believe the county secretary is the most important factor in the development of peace and good will among the members.

Keeping the machinery of the society well oiled and running smoothly is no small task, and this is doubtless the experience of many, but perseverance and tact will tide us over the greatest of difficulties and bring peace in the end.

---

## HOW TO SECURE THE ATTENDANCE OF COUNTRY MEMBERS AT MEETINGS.*

BY M. V. DEWIRE, M. D.,

SHARON, WIS.

The successful man in any line of business is the man with a long memory and a cool head. The man who never forgets anything and whose mind is a veritable storehouse of facts, laid away in proper order for the time when they shall be of use to him.

So with the successful secretary of the County Medical Society.

His mind must be stored with the hundred and one facts that bear upon his particular work, and they must be arranged in order so that he may call upon them at any time he may wish to arrange for a meeting and get up a program for his society.

He must remember that Doctor A. can be relied upon to fill a place on the program at any time that he is called upon and will be reasonably sure to have something of interest to put before the society when he gets there.

He must remember that Doctor B. can prepare a good paper on surgery and Doctor C. a good one on medicine, that Doctor D. can not prepare a paper to save his life but can and will join in the discus-

---

*Read at the 2nd Annual Meeting of The Association of County Secretaries and State Officers, Waukesha, June 6, 1911.

sion and is often able to bring up something that will be of interest to the rest of the members present.

That still others can either prepare good papers or discuss them but are eternally so busy, don't you know, that they can't possibly get away to attend the meetings. They wanted to come and had their papers ready but at the last moment something turned up so they could not get away. You know the kind.

All these classes of men require a little different sort of handling and the whole question resolves itself into a study of human nature and the handling of men, that requires gray matter of a little different quality than the average man possesses to make a success of the work.

It was because I thought that I had discovered a man who possessed some of this peculiar kind of "gray matter," that I placed in nomination the name of the present incumbent of the president's chair. But when he asked me to prepare a paper for this meeting upon this particular subject I still thought I had pretty nearly expressed the quantity of that matter when I used the word "some." I think Dr. Redelings pretty nearly got even.

How can we secure the attendance of the country members? In the first place I should select the place of the meeting with an idea as to convenience of reaching it to the greatest number of members. If there are several places in the county that are equally easy of access to all members, then it is a good plan to shift the meetings around. If the County-seat or Metropolis of the county is the better located for this purpose, then let the meetings be held there.

Arrange the time and number of the meetings to suit the majority of the members. In Walworth county we have found that quarterly meetings are about all that we can manage conveniently and we usually choose the middle of the week for that meeting. The time of day is arranged for the greatest convenience in getting in and out on the trains and we always manage to have a good feed together and we like to have it before the meeting. This gives a chance for renewing old acquaintances and cultivating new ones, the exchange of experiences and much talk that is of mutual benefit to all. It breaks down reserves and petty jealousies and cements friendships, and makes the discussion of the subjects on the program which follows much easier.

We have not as yet tried the evening meetings. Our villages and towns are well scattered, four of them being in the extreme corners of the county so that at least half of our membership must drive

twenty to twenty-four miles to reach the meeting place at the county-seat, there being practically no railroad facilities from these points.

But in these days of automobiles and roads that are improving somewhat, it would seem that evening meetings might be practicable during the season of good roads. Invite the doctors to bring their wives with them and let the ladies visit while the men are discussing their business and work. Devote an hour and a half to the program and an hour to the social part and lunch. The presence of the ladies adds very much to the social part of the evening and their company makes the long rides to and from the meeting place very much pleasanter. And they will get as much enjoyment out of the evening as you do.

The printing and arranging of the program and invitations can be made to wield quite an influence in getting the attendance of the members. I prefer a three or four page invitation using the first page for the invitation proper and the second page for the program. On the third page I like to have a letter directly to the members, explanatory of the program and the work and boosting the meetings and the society. The fourth page can be used for the social features or anything that will appeal to the members or help the secretary.

In arranging the program it is best to take up live subjects for the principal part of it. Subjects that are of particular interest to members of certain localities will often bring out several members who are not in the habit of attending the meetings regularly, for instance: The village of X has been having an epidemic of scarlet fever, in which there have been a number of deaths and the health officer has been having troubles of his own in maintaining a rigid quarantine, or the city of Y has been having a lot of cases of measles with many cases of the hemorrhagic variety, with the usual complications and several deaths, and Z is having a tussle with diphtheria that is difficult to control.

Such papers as these help to get out the attendance because they are particularly interesting to the physicians of these localities and the discussion of them will bring out points of interest that will be helpful to those who are working with these troubles at this time.

Encourage the members to report their difficult and unusual cases. Some of the most interesting things we have ever had at our meetings were case reports of this kind. The questions asked and the discussions of the various features of the case set every body to thinking and serves to bring out points that will be useful to many others who may have similar cases.

The scientific side of the program must not be neglected either

and it is well from time to time to invite in some one from the outside, who is making investigations along special lines and thus get the benefit of the advances being made by these men who have time to do this kind of work.

The social feature can be relied upon to bring out a good attendance for at least one meeting of the year. The selection of some subject of semi-public interest such as Anterior-Poliomyelitis, Tuberculosis, The Public Drinking Cup Evil, or the Spread of Disease by the Common House Fly, will help to attract and the securing of a good speaker with possibly an illustrated lecture helps mightily.

Invite the doctors and their wives to this meeting and in addition to the program have a good dinner with an after dinner program of toasts and songs and follow with a boat ride, trolley ride or an auto-ride. This makes an agreeable change in the program, a day of entertainment for the ladies and of recreation for the doctors, helps to swell the attendance and keeps the society alive and doing something.

Drawing attention to the mutual aims of the profession, our continued advancement and the necessity of keeping pace with that advance if we would keep abreast of the times and not become a back number in the profession, our inter-dependence upon our neighboring physician, and our banding together for mutual protection against the mal-practice shark, all these and many other things that tend to make our profession a solid unit, can be used to help bring the members out to the meetings.

But the largest factor in the successful meeting is the personal element between the secretary and the individual member. He must know every member intimately. He must know enough of his personal character, his likes and dislikes, his ability and willingness to help along the work, to enable him to get the best there is out of the material he has to work with. With some of the members his personally expressed wish that they attend and take part in the meeting is sufficient, others have to be urged and still others are from "Missouri" and have to be shown the advantages to be derived from attending, but once seen they are fairly regular attendants.

And we never want to lose sight of the fact that the Country Doctor is doing his best to fill one of the most trying positions in the world. By the majority of the laity he is never supposed to need a vacation, nor to need any time off for study, but must always be ready to go at the beck and call of any one in his community, rich or poor, great or small, at any hour of the day or night and in any kind of weather and if he isn't right on tap at the minute he is called then something is to pay. If he wishes to attend a County Medical

Meeting or the State Society, he must just pick up and go. It is very rare that he can leave his work in anybody's care. And all the time he is gone he is wondering who is wanting him and who is suffering because of his absence.

"Who, of all men, to those who suffer brings
Most comfort, most relief from pain?
Whose is the helping hand ne'er sought in vain?
Ask of yon happy little lad,
Whose legs were crooked and whose back was bad,
Who made him straight and put his back at rest?
Ask of some mother at whose happy breast
A new-born babe is held with joy and pride,
Who sat beside her and to whom she cried
For help and comfort in her hour of pain?
And ask her if she ever cried in vain?
To be day and night, at the beck and call
Of men who cheat and women who lie:
To know how often the scoundrels live
And see with sorrow the dear ones die:
To be laughed to scorn as a man who fails
When nature claims her terrible debt:
To give a mother her first born's smile,
And leave the eyes of the husband wet;
To face and brave the gossip and stuff
That travels about through a country town;
To be thrown in the way of hysterical girls,
And live all terrible scandals down;
To study at night, in papers hear
Of new diseases and human ills;
To work like a slave for weary years
And then to be cursed when you send your bills."

Such is the life of the average country doctor and to keep him interested in his profession and in the society work and get an average amount of attendance and work out of him is no small task. The secretary must use all the facts he has stored away in his cranium all the tact that he possesses and more energy than he really has to spare and use them judiciously and continuously in order to secure the desired end.

And lastly, gentlemen, don't forget to "boost" Boost your society; boost your programs; boost your meetings; boost your profes-

sion and get your members to help you boost and we will leave it to the members themselves as to whether you are making good use of the gray matter that nature endowed you with, or not.

---

## BOOK REVIEWS.

---

**The Cause and Specific Cure of Hay Fever.** W. P. Dunbar, M. D. (Reprint—Deutche; Med. Woch., May 3, 1911.)

The author vigorously defends his theory of the causal factors. He has come to regard Hay Fever as an anaphylactic reaction, and the description of his numerous experiments seems indeed to carry conviction.

The anti-toxic preparation known as pollantin it is asserted, contains for the dry powder a pure mixture of horse serum and sugar of milk, while the liquid form has only in addition ¼ per cent of carbolic acid as a preservative.

Absolute disclaimer is made of the charge of cocaine or adrenalin additions.

---

**On Cauterization of the Eye and Epedermis by Ammonia.** Pichler, A., Klagenfurt (Zeitschrift für Augenheilkunde, XXIII, April 1910, p. 297), reports in detail 3 cases of his own and in abstract a few from literature. Altogether 26 have been published. The clinical picture consists in redness, swelling of the conjunctiva, lacrimation and photophobia. In more severe cases greyish white brittle membranes are formed which can be easily removed and leave the conjunctiva devoid of epithelium, sometimes prevaded by ecchymosis, later on granulating. The cicatrization may lead to total symblepharon. If the cornea is injured a diffuse haziness develops or purulent sloughing with perforation, complicated by iritis hypopion, sometimes ending in panophthalmitis. A very protracted course is characteristic and the apparently at first benign prognosis may become very doubtful, as the inflammation of the cornea and iris may set in very late. Therefore anesthesia and haziness of the cornea are very ominous signs.

The deleterious action of ammonia on the eye is due to its affinity to water, which is extracted from the animalic tissues, and to the formation of an albuminate. Thus the molecular strncture of the epithelium and the upper layers of cells is destroyed, so that they become necrotic. The dead tissue, as foreign body causes an inflammatory irritation of the deeper tissues. This may be aggravated if the ammonia gas from an exploded ice engine strikes the eye under high pressure or if watery solutions of a higher temperature are squirted into the eye. For the treatment profuse irrigations with water are indicated to remove remnants of the poison from the conjunctival sac and perhaps the upper strata. As it has been experimentally shown, that ammonia soon after the injury is found in the aqueous, P. recommends for the protection of the interior of the eye immediate puncture of the anterior chamber. His experimental studies on the action of ammo-

nia on the eyes of rabbits are also described in conjunction with those of others.—C. Zimmermann.

---

**A Case of Unilateral Blindness After Injection of Paraffin Into the Region of the Nose.** ZAHN, ERWIN. (From the eye clinic of Prof. G. Schleich in the University of Tuebingen. Klinische Monatsblatter für Augenheilkunde XLVIII, March, 1910, p. 338.) A woman, aged 41, on awakening from narcosis, in which a 3rd injection of paraffin had been made into the nasal region, for correcting a saddle nose, could not see out of the previously normal left eye. The examination on the next day revealed amaurosis, no papillary reaction and the typical picture of embolism of the central retinal artery. Paracentesis of the anterior chamber was of no avail. At the forensic examination, 9 months later, Z found the direct reaction of the pupil abolished, the consensual and that on convergence prompt, the disc very pale, glaucomatous excavation and chorioretinitic changes. He ascribes the affection not to an embolism which would require the rather impossible assumption that a particle of paraffin passed through the capillaries of the lungs, but to an interruption of the blood supply to the central retinal artery on a direct way from the place of injection. A review of the cases of "embolism" observed after injections of paraffin, shows that after injections of paraffin into the nasal region only the eye was damaged and never embolisms of other organs, especially of the lungs, occurred, and that, on the other hand, after the numerous injections into the urogenital region embolism of the lungs but never a simultaneous embolism of the central retinal artery was ascertained. This strongly suggests that between the place of injection at the nasal region and the interruption of the blood current in the central retinal artery certain direct relations must exist. In the future attention ought to be given to the fact whether always the homolateral eye is affected or not.—C. Zimmermann.

---

# THE WISCONSIN MEDICAL JOURNAL

SEPTEMBER, 1911.

## ORIGINAL ARTICLES.

## ESSENTIALS AND NON-ESSENTIALS IN PHYSICAL DIAGNOSIS.*

BY RICHARD C. CABOT, M. D.,

BOSTON.

I would like to say a word or two in the first place as to the amount of material from which the conclusions which I am to present to you this afternoon are drawn.

I have been connected with the Massachusetts General Hospital in Boston for nearly 20 years, and I have been watching autopsies at that hospital pretty much all that time, and I have seen there about 3,000 autopsies.

To me the most essential part of medical practice at all times is to confront my guess or my supposition or my belief, with the actual facts at autopsy or operation; and if you ask me why do I believe what I say, or that this or that method of examination is good, important or practical, and that other method of examination is less important or unimportant, it is because of my own experiences in trying these things, in seeing what conclusions I could draw, and then being confronted with the findings, and often being shown wrong, at autopsy.

As you know, the majority of the books on physical diagnosis give you your choice of a great many different procedures, no one man being wise enough to understand them all. The methods of examining the chest, the methods of examining the sputum, the methods of blood diagnosis, are discussed in practically every book on physical diagnosis, and you may take your choice of a great many alternative methods, which no living man has had long enough life to test out for himself.

*Annual Address in Medicine delivered before the State Medical Society of Wisconsin, at Waukesha, June 8, 1911.

Now I want to pursue another method, trying to tell you not what ways there are, but what ways and what signs and what methods have stood the test of my own personal experience, as confronted by the showdown of operation or autopsy.

I shall run through briefly the less obvious and more important parts of physical diagnosis, leaving out the points that are perfectly well understood, on which we would all agree, trying to pick out here and there the essentials, and especially the controverted points, and then to give you what seems to me to be the truth.

When we make a physical examination of a patient coming to us for diagnosis, I suppose that almost all of us have acquired some one method, some one order of examination.

Personally I happen to have acquired the habit of beginning at the top of the head and examining the head first, then the thorax, abdomen and extremities; and in what I have to say to you, therefore, I shall pursue the same method, beginning with what there is about the head that seems to me worth discussing, and then coming down.

Now, to begin with the scalp: I was once shown wrong upon a diagnosis, because I did not pay sufficient attention to the scalp. Nothing ever teaches me so much as my own mistakes in diagnosis. I always used to wish when a student that my teachers would tell me more about their mistakes; and now that I have come to do some teaching myself, I make a point always with students and medical men, of telling them my mistakes, because they taught me something, and I hope they may prove instructive to others.

### SYPHILITIC NODES IN THE SCALP.

I had a case once sent to me for splenic anemia. The patient was a married woman with a big spleen and marked anemia; she also had a little ascites. Her husband was a physician and he brought her to me. I went over her rather hastily, but did not examine the scalp. I sent her to a hospital for more thorough study, supposing that without doubt she would come to the operation of splenectomy, which I believe to be effective in the very rare cases of true splenic anemia. While she was there in the hospital a colleague of mine who is now assistant professor of clinical medicine in Yale, went into the ward where she was and saw the case. He fell into a talk with her and she happened to say to my friend something about some trouble she used to have with her scalp, though she had not said anything to me about it. He got his hands upon her head and found some nodes in different parts of her scalp that led him to look into her nose, and

he found a perforation of the septum. Then he found that her shins were distinctly bowed forward, and that led him to whisper a thing or two in my ear, which led me to postpone the operation. (Laughter.)

Now the happiest part about that mistake was that it was found out in time. Although that woman had her belly full of ascites and a bad anemia and enlarged spleen; yet absolutely all of that disappeared under nothing but inunctions of mercury and iodide of potassium, and she is a perfectly well woman today—3 years after. I have seen a number of cases since where there were nodes in the scalp, bony thickening of old healed patches of periostitis, which were so obvious that even I, after this awakening, made the correct diagnosis.

### FRONTAL SINUS HEADACHE.

Next I want to say something about headaches connected with frontal sinus disease. When I was between 10 and 15 years of age I particularly recollect a very peculiar kind of headache that I had. I lived in an absolutely non-malarial district; and yet I had a headache that came on within 10 minutes of exactly the same time every morning, between 10 minutes of 9 and 9, and went off within a half hour of the same time, between half-past 10 and 11 every day. My doctor did not know the diagnosis, but I am pretty sure I know now. That was a headache due to frontal sinus disease, of which I have seen many cases; and I know of no other kind of headache that comes on at the same hour and goes off at the same hour. There are other headaches that come on in the morning, but they are not so regular. (Great laughter.) They generally begin over night, too. (Laughter.)

### GOUTY DEPOSITS IN THE EARS.

We have very few cases of gout in Boston, not more than one-third as many as they have in Baltimore, and yet from the character of our population and the habits of our ancestors in that part of the world, I have every reason to believe that this small number of cases of gout is due to the fact that we do not diagnose the cases, while they do diagnose them in Baltimore. In other words, I believe we fail to recognize gout a good many times.

All of this is preliminary to speaking of one of the ways of recognizing gout, which I have often missed, and that is the tophi in the margin of the ears—the little hard, chalky deposit in the cartilage of the ear. As I used to make physical examinations I often utterly neglected to look at the external ear. We often find it hard to look

for these nodules, which, when present, are as near to a pathognomonic sign as any I know. Of course one must exclude the soft sebaceous cysts, whose contents can be expelled, and also the little cartilaginous projections sometimes called Wüllner's tip, which may look a little like a tophus; also the little nodular remains of a frozen ear. But all those things are perfectly easy to exclude, if one has seen and felt a tophus. There is nothing else like it; and it is absolute proof, so far as I know, of gout.

### THE LEAD LINE.

Now, coming to the mouth, I want to begin with another story of a mistake which I happily avoided, although I came very near making it. A doctor called me up from out of town, and said, "Did you ever see convulsions due to anemia?" I said, "No, I do not think I ever did." "Well," he said, "I have a case out here with anemia and convulsions, and that is all I know about her; will you see the case?" I went into a rural part of Massachusetts, to a very small town, and to a small farm on the outskirts of that town, and I saw a young woman about twenty-five years of age, with the following history: She was twenty-one when married, and had had a baby six weeks before the time of my visit. Three weeks before—that is about the third week of the baby's life—she began to have headaches for which she consulted her physician. Her physician found anemia, a definite lowering of hemoglobin, by the hemoglobin test; he told her she was anemic, treated her for anemia, and she began to improve, her child, which she was nursing, doing perfectly well meantime. But suddenly out of a clear sky she threw a fit; and between the time of that fit and the time I saw her, which was six days, she had eight convulsions—generalized epileptiform convulsions. It seemed clear that she did not have epilepsy; she had no history of anything of the kind; it was perfectly clear that she did not have uremia, her heart and urine being entirely normal; she was not hysterical and the convulsions had no characteristics of hysterical fits. The question was, what were they? I examined her in the way that I am now suggesting, beginning from the top of the head and going down; and after going over her once, I was just as wise as before. I had not found the cause of her convulsions. Then I pulled myself together and started at the top and went over her again, and that time I remembered the thing I forgot the first time, that I had so often told me students before and have since, not to forget, and that was the gums. What is there in the gums that can produce anemia and convulsions? Lead. Now, the

reason I did not find the lead line upon her gums the first time I looked over her—although I looked into her mouth—was that I had been so often misled by the term "blue line on the gums". Those of you who know the lead line know that the essential thing about it is that it is not blue and it is not a line—that it is black and not blue, and is caused by the precipitation of the black sulphide of lead, which is as black as your hat; and that it is a series of dots or stripes radiating off and being deposited in the apex of each capillary pyramid, as we know in the histology of the gum. The value of that was this, that it led me to see why she had the convulsions. The lead encephalopathy accounted for her anemia and gave us a clue to curative treatment. As I said, she lived upon a farm in the outskirts of a rural village. Where did she get the lead? She was not a painter or printer; she had not any of the ordinary industrial sources for lead; if she got it she must have got it from drinking water; and then other people must have got it, and I turned to her husband and examined his gums, and true enough I found a lead line on every tooth; I found the cook had it too. The only other person in the house was the baby, who having got her nourishment well filtered, did not have a lead line, and also because the baby had no teeth, and you cannot have a lead line without teeth. I believe lead lines are much commoner than diagnoses of lead poisoning, which I think is a common disease in my part of the country, and probably in your part of the country. These people had to drink water coming from a well, the water from which was full of lead, as was proved by analysis. They had about 60 feet of lead pipe coming from the well to the house. That is not in itself enough to account for there being lead in the water; but there was something peculiar in the chemistry of the water, whereby it attacked the lead pipe.

### SYPHILITIC THROAT.

A routine throat examination, I believe, is absolutely essential, no matter what the patient comes for, because the patient may have syphilis in the throat and have no idea of it. Syphilis may be absolutely painless in the throat; the patient may not know a thing that would lead you to the diagnosis; and the longer I live in medical work the more I feel that anybody may have innocent syphilis, and in every case of doubtful diagnosis that possibility should be considered.

### THE SENTINEL GLAND.

Coming down to the neck, the only thing worth mentioning is the so-called sentinel gland, the little gland that we find just at the

attachment of the sterno-mastoid muscle in many cases of malignant disease of the abdomen, a gland which has put my attention in the right direction again and again, when I should otherwise have missed the diagnosis,—a little hard nodular thing the size of the end of your first finger, just above the clavicle, and quite different in position from the ordinary tuberculous glands, or glands from throat diseases; they lie further back.

### SATINY SKIN (ALCOHOLISM).

I happened to have made it a habit after examining the head and neck, to put my hands on the patient's shoulders and pass them down over his arms, in order to note the feel of the skin, for this reason: One of my teachers years ago passed along to me a point he had learned from Hebra in Vienna many years before, to the effect that alcoholism produced in many persons a peculiar change in the skin other than that we are familiar with in the comic prints and on the stage, a change which you can feel, but cannot see, a peculiar satiny, smooth, delicate quality of the skin, which you can appreciate if you pass your hand quickly over the shoulder and arm in cases where alcoholism is present. Those of you who make life insurance examinations will find that this may put you on the right track. I refer to the extra smooth feeling skin in a person who has no special right to have an extra smooth skin.

### INEQUALITY OF THE PULSES.

I have formed a habit, following one of my teachers, after putting my hands down over the arms, to take hold of both wrists and feel both pulses at once, which may enable you to suspect a diagnosis of aneurism. It is a very simple, trivial procedure, but of some importance.

### BLOOD PRESSURE.

The next procedure, following my personal routine, is the examination of blood pressure. That leads me to say something about the value of blood pressure in physical diagnosis. If I were allowed to have only two instruments of precision for my aid in physical diagnosis, they would be the stethoscope and the blood pressure machine. I have been saved from wrong diagnosis and put on the track of right ones, more often by that machine than anything else I know of except the stethoscope. And I am speaking now, as I spoke all along, by the check of the autopsy. I regard the measurement of blood pressure

as the most important of all the resources that have been added to our armamentarium as physicians, in the last 15 years. The measurement of blood pressure when you are familiar with the method can be made in a minute and a half, perfectly well. The instruments are rather bulky, i. e., the only accurate instruments are bulky. The little machines which are widely advertised as being very portable, are splendid for the first few months, but if you do many high pressures on them, like any other aneroid instrument they give out. The only reliable machines are those that have a column of mercury, which is a bother to carry around, but is necessary. I could talk all the afternoon on the subject of blood pressure, but I will confine myself to saying that it puts one right most often in relation to cardiac and renal disease. Patients, the examination of whose hearts does not show anything certainly characteristic of disease, have often been shown to me to be diseased, or proved later to be diseased, by the high blood pressure registered by the machine, pressure which my fingers are not always able to detect in feeling the pulse at the periphery. I do not any longer trust my fingers to be sure of a high tension pulse; I used to, but I have convinced myself that I cannot do it. On the other side there are many irregular hearts which you finally believe to be merely functional in origin, and to have no immediate significance, because the blood pressure is normal. An irregular heart plus a high blood pressure is serious. The very same heart with low blood pressure may be of no great significance.

Then calling your attention to the early diagnosis of kidney lesions, I see a good many cases of renal disease entirely free from albuminuria or from casts, but with high blood pressure, which are shown later post mortem to be renal disease. These cases could not have been suspected to be renal disease except by blood pressure. In other words I regard the blood pressure measurement as of more importance than examination of the urine in chronic kidney trouble. Examination of the urine has again and again led me astray,—the measurement of blood pressure almost never.

### INCIPIENT TUBERCULOSIS.

Coming now to the examination of the chest. Out of the many things we might discuss I would like to speak of but a few points which seem to me of value in the early diagnosis of pulmonary tuberculosis. (a) First I should like to speak of the change in the quality and pitch of inspiration. If you recall the ordinary teaching in physical diagnosis as to the changes in breath sounds, stress is laid almost

wholly on the expiration, which is prolonged, high pitched and intensified when the lung becomes condensed and solidified by disease. But there is a much earlier stage, marked chiefly by changes in *inspiration,* which you will not hear unless you are constantly on the watch for them. The characteristic changes to which I refer are two: Inspiration as compared with the sounds over the healthy portion of the other lung is higher in pitch, it is shriller, it sounds thinner, it sounds more as if the air were coming through a smaller space. To those who have musical ears I may say it is higher in pitch. The other point about it is that it is very apt to be intermittent or broken up into sections ("cogwheel respiration"). Those changes are not significant if heard all over the chest. They are only significant if they are heard at one spot, as at the apex or base; but if they are heard and persist at a certain point, I think they have the same kind of value in pulmonary diagnosis that finding a bunch of fine crackling rales has in this same diagnosis.

(b) In relation to those same crackling rales, the finest sounds, the most difficult to hear of all the sounds in relation to pulmonary diagnosis, there are one or two points I would like to speak of. In the first place these sounds in incipient cases are so faint that no man will hear them who has not thoroughly studied all the possibilities of what his fingers can produce in the way of sound by slipping on the stethoscope, and what the stethoscope can produce in the way of sound by slipping on the skin. The rales are precisely like finger rubs and skin rubs produced in these two ways. Any one who has worked out the sounds made by his own fingers on his own stethoscope and by his own stethoscope on his patient's skin, and knows what those sounds are, will be able to distinguish those sounds from the intrapulmonary sounds in these incipient tuberculous cases. I make it a practice to use a stethoscope of the old-fashioned type, with the hard rubber bell (not the Bowles type which I use on the heart) in studying the sounds from the apices in incipient tuberculosis. Such a hard rubber bell can be dipped in water, so that the sounds of the slipping of the stethoscope and fingers are excluded; then you are ready to listen with all your might to any sound and give it its rightful interpretation.

A patient once came to me who after I had examined her lungs gave certain signs of being satisfied, and said, "I can always tell when a man knows how to examine lungs." I said, "How. I am interested in that?" She said, "I always know that if a man examines my lungs and does not make me cough and breathe after it, he does not know his job." Luckily I happened to do that. (Laughter.) I thought I would pass that on for what it was worth, because she may visit you

some day. She is perfectly right. There are some cases which you cannot diagnose unless you listen to the cough and the first breath after it.

Occasionally I visit Dr. Trudeau's sanitarium at Saranac—that very great man—to learn what I can. One of the last times I went there they put me onto a trick that is very useful. When you want to bring out rales not easily heard at the top of the patient's lung, make the patient take a long breath in and then a long expiration and then cough at the end of the expiration. Listen carefully for the breath that comes after that. What is secured by that is this: The patients who cough at the end of expiration cough with almost no breath; hence they have to catch their breath very briskly, and they stir up the air and the alveoli of the lungs in such a way as to cause rales if there is any moisture there. "Breathe in, breathe out, cough at the end of expiration." That's the formula.

### SPUTUM EXAMINATION.

In regard to the examination of sputa; I was glad the point was brought out this morning by several gentlemen, that where the examination of the sputum discloses the bacilli of tuberculosis, it is an evidence of advanced lesions and not early lesions. If you wish to get hold of incipient cases you must get hold of them before the bacilli are in the sputum. Sputum with bacilli means open tuberculosis.

I would also say that the mixture known as *antiformin* is very useful in the discovery of bacilli when they are scanty. If they are numerous we can any of us find them; if they are scanty, antiformin will help us very much.

### GROCCO'S SIGN.

Some of you have read in journals or text books of a physical sign known as Grocco's sign, in connection with the diagnosis of pleural effusion. It ought to be called Koranji's sign, as he described it first. But it is of no value as you will discover if you attempt to use it. Grocco's sign is a triangle of dullness at the base of the sound lung, due to the pushing over of the mediastinal tissue by the fluid. It is claimed that this area can always be percussed out when you have plural effusion on the other side, but practically you must already have made your diagnosis before you can use the sign, which therefore is valueless.

### CARDIAC PERCUSSION.

Coming to cardiac diagnosis, I do not myself use percussion on the heart to any extent, not because I have not done it; I have done it in a great many thousand cases; but because it seems to me I can get all that I can rely upon in relation to the size of the heart, by palpation and inspection and blood pressure. If what I can feel and see and the blood pressure do not tell me that the heart is big, percussion never does. Of course when I know by the use of easy methods such as palpation, inspection and blood pressure, that the heart is enlarged, then I can also percuss it out, but that is unnecessary. Most of you who have taken the matter of cardiac percussion seriously, and especially the percussion of the right border of the heart, know that it is mighty difficult; it is so difficult that I have given it up, and I do not suffer in accuracy of diagnosis as compared with autopsy findings, since I have given it up.

### WHAT IS THE APEX BEAT?

We speak of the cardiac apex as being, we will say, the 5th, 6th or 7th space and so many c.c. outside, or so many inches outside of the nipple line; but we do not always remember to say what we *mean* by the cardiac apex. The cardiac apex, as we use it in physical diagnosis, does not mean or should not mean the place where the heart is most easily felt and seen, striking or moving the chest walls. In other words, the maximum, the most obvious impulse is not the one we are after, for it does not correspond to the apex of the heart, but to a point somewhere between ¾ and 1½ inches in from the true apex of the heart. The true apex is outside of that and is obtained by taking the maximum impulse and following that out as far as possible and down as far as possible, until those two lines cross. That is the real boundary of the heart, and not the maximum. I know this by comparing it with the X-Ray showing and with autopsy. In the autopsy we place pins where we thought the apex was, and opening the heart and seeing where the pins struck confirmed our location. That is of great importance, because if there is one point more than another essential to know, it is how big is the heart, and the only way to find out how big it is is to find the cardiac apex in the way I have suggested.

### CARDIAC MURMURS.

*Cardiac murmurs* I have found from my own experience, are a source of great confusion to many physicians. I will first state that

I would never diagnose heart disease upon the evidence of a murmur alone. Why? Because I have so often been shown to be wrong. I would diagnose heart disease only on the evidence of murmurs plus other signs, such as cardiac enlargement, high blood pressure, changes in peripheral arteries, in the pulse, and in what we hear at the base of the heart other than murmurs. For instance a systolic murmur at the apex is not evidence of mitral regurgitation unless backed up by those other signs. You need at least three and generally four legs to the stool. If you try to have it stand upon one or two it will fall. So with your diagnosis: If based on one sign like a murmur alone, it is not enough; you need three or four signs. The same is true with diastolic murmurs at the base. Unless you have changes in the pulse to back them up you will not be safe in diagnosing aortic regurgitation from a diastolic murmur.

In my belief in a large proportion of all children there are cardiac murmurs without disease of the heart. Go to a gymnasium where children come, or to a school and examine children in routine as I have, and you will find that 40 to 70 per cent of children have cardiac murmurs which do not mean anything in the way of disease or anything that that child needs to pay any attention to. The differential point there is that you find a murmur and nothing else. The heart otherwise, in its size, sounds, etc., is perfectly normal.

### THE VALUE OF A GOOD HISTORY IN ABDOMINAL DISEASE.

Now, coming to diseases of the abdomen: I have finished most of what I have to say with reference to diagnosis above the waist. In the first place in relation to the disease of the abdominal viscera, the history, if carefully taken, is often of more value than physical examination. As I see cases in consultation it seems to me that there are fully as many mistakes made by not getting a careful history that goes way back, as there are by not making a careful physical examination. As I see cases in consultation, the physican generally begins with some statement like this: Patient came to my office three weeks ago, and I did this, said that, etc. In other words, the doctor's history of that patient began three weeks ago. He has not inquired what happened three years or more ago with any sufficient thoroughness. And I believe in relation to the gall bladder, the stomach and the intestines, that the history is the essential point; and I am glad to know that certain surgeons, such as the Mayos and Maurice Richardson, entirely agree upon this point. You may have duodenal ulcer with absolutely no physical signs. In fact you generally do. You may have gall

stones and all sorts of diseases in the biliary tract, with no physical signs. You may have cancer of the stomach or intestine with no physical signs. The history, if anything, will give you the clue in most of these cases. When there are physical signs, of course they are mostly those obtained by palpation, and palpation of the abdomen is one of the most unsatisfactory and difficult of all of our methods.

I believe we get a great deal of help from a procedure first suggested to me (I do not know by whom it was originated) by Dr. George Dock, formerly of Ann Arbor, and that is by putting patients in a hot bath in which they can lie comfortably without feeling as if they were going to drown or slip down and get their heads under—a comfortable warm bath,—that relaxes the abdominal walls, not as much as anesthesia, but perhaps ½ to ⅔ as much. Such a bath has given me an opportunity to feel tumors that could not be felt before, or to exclude tumors which the surgeon thought he did feel before.

### THE USE OF THE STOMACH TUBE.

Now coming to gastric examination with the stomach tube: The essential thing, as it seems to me, that you want to know about a stomach, is not the question of hydrochloric acid or any chemical substance; neither is it what you find with a microscope in the sediment. The essential thing is, can the stomach empty itself or not? Can it push its contents through the pylorus or not? That you find out, not by chemical or microscopic examination, but by physical examination, by the tube, by determining whether there are contents in the stomach before breakfast, whether there are contents in the stomach, 4, 5, or 6 hours after a meal, and what is the nature of the contents as pressed or pumped out of the stomach with the stomach tube. Another important point is, how big is the stomach? In other words, in this field, as in several others which I will mention later, the essential information is given by physics not chemistry.

### GASTROPTOSIS.

Regarding the position of the stomach I want to say a word, because a distinguished colleague of mine who will address you tomorrow, will probably give you precisely the opposite opinion. I do not believe there is any such disease as gastroptosis. I know that there are dropped-stomachs. I have seen hundreds of them, but I do not believe they are a cause of disease, not of joint disease or of

stomach disease or of any other kind of disease. Now, why do I believe this? Because I have seen so many of them in absolutely healthy people. How do I know they are there? By the bismuth and X-Ray test. By putting bismuth in the stomach and X-Raying the stomach you can convince yourself that a considerable portion of the healthy people in this room have stomachs that reach almost to the pubes, and that altogether irrespective of their habits, so far as I know. Gastroptosis, and the dropping of kidneys, colon, etc., I regard as a thing that happens and that may go along with various other diseases, but it is not of itself a disease or cause of any symptoms whatsoever.

### BISMUTH AND X-RAY IN ABDOMINAL DIAGNOSIS.

Some of you have doubtless studied or heard of the use of bismuth in the examination of the stomach and intestine,—putting the bismuth into the stomach and intestine and then taking X-Ray plates as a means of early diagnosis of cancer or ulcer in one or another viscus. I have so far had no success with those methods. I do not say that they are of no use. I say that I have given them some trial and have not yet gotten any use out of them. I believe if a man could spend his days staring through a fluoroscope, in order to know just when he should take an X-Ray plate, he would doubtless find something of considerable importance in regard to the diagnosis of stenosis of the intestines or pylorus or ulcer or cancer; but as we ordinarily take X-Ray plates with bismuth in one of those places, they seem to me to add fully as much darkness and confusion as they do light, to the situation. I have got no use out of them.

### THE FECES.

Examination of the stools, a rather neglected portion of physical diagnosis for certain obvious reasons, is of value frequently in gross. I think to get a habit of looking at patients' stools in gross is valuable, but beyond that, that the microscopic and chemical examination is rarely of any use. It has been of use in two respects in my own experience. The guaiac test for occult blood is a very quick, sure and easy test, the only thing against it being that it is a little too delicate. It shows amounts of blood so small that it is often of no consequence; but if you get a positive guaiac test for blood day after day in a person whom you suspect for other reasons of having ulcer or cancer in the intestinal tract, then it is of value. There are other methods, but guaiac is one of the simplest.

The other thing that we could use in the examination of stools is looking for eggs of the various intestinal parasites which are easy to find if they are there. This is not, of course, of value in many cases, but of great value in some.

## THE URINE.

The urine, I believe, as we all do, should be examined in every case, no matter what is the matter with the patient, but I believe that we ought to make our examination very much briefer than most of us were taught in medical schools to do. It seems to me one of the happiest and most encouraging signs of the times is that the books on urinary examination are getting smaller rather than bigger. There has got to come a limit on these things. If we had to do everything recommended we could not examine more than one patient a week, and that is why we must pick and choose in urinary examination. There are certain essentials which can be finished up within two minutes, and those are as follows: The first procedure, which is the most important, takes none of your time; that is the collection of the twenty-four hour amount of urine and its division into a day portion and a night portion. That I think is the most important single fact you can know about the urine. How much does the patient pass in twenty-four hours, and how much is passed in the day and how much in the night? Ordinarily we pass twice as much in the day as the night, but in kidney trouble early or late, and sometimes very early, we pass more at night than we do in the day. That is a very essential point, and it does not take any of your time whatsoever to find it out. It takes some of the patient's time, but it is a good thing to keep him busy; he often needs it. Make him bring you a carefully measured twenty-four hour specimen of the urine separated into day and night portions.

Then comes the specific gravity, which requires ten seconds to take. When you have those two facts you have all you need to know about the total solids or urea or anything else in the work of the kidney that you can find out. I long ago threw away my Squibbs urea apparatus. There is no use of examining for urea or phosphates or sulphates as we were taught to do, and which they still do in laboratories. You know the kind of play bill that comes out of the laboratory—about fourteen things are listed. Some patients carry them around and show them with great pride to physicians, but it does not impress me, as I know that those facts practically give no information

to the physician on which he can base his diagnosis, prognosis or treatment.

You can tell all that you can tell by any of these methods about the work of the kidney by putting together the specific gravity and the total amount. If you know those two facts you know the work of the kidney as well as you can find it out by any method, *except* the very difficult, delicate methods of metabolism examination, such as you can carry out in a cabinet or laboratory. Urea examination is absolutely valueless except as a part of a careful, long metabolism experiment, which requires a knowledge of exactly what and how much the patient has taken to eat, exactly how much urea has gone out in the feces and all about the facts of metabolism. The rough measure of kidney function can be told from the twenty-four hour amount of urine and the specific gravity. The exact measure cannot be told by any clinical method; it can only be determined by laborious laboratory experiments.

I have spoken of the twenty-four hour amount and specific gravity which are the most essential things. The only other things important are the tests for albumen and sugar, which you can do in half a minute each. Occasionally you may have to test for the abnormal acids, which you can test for roughly in a minute; and if you do not find sugar, that is not necessary. If you do not find albumen, you need not look for casts, and even if you do find albumen you are to be excused if you do not look for casts, because I have yet to get any information out of looking for casts that I could not get out of the other points that I have given you. If you find the patient has the physical characteristics of nephritis, with albuminuria or without it, if you have high blood pressure, you know all you would know if you found casts.

On the other hand the sediment is of great value sometimes in showing the presence of pus. The presence of pus in a catheter specimen is sometimes the only thing that will tell us that there is trouble going on in the pelvis of the kidney. I have seen a number of cases of perfectly unexplained fever where the explanation was found only after we had a catheter specimen of urine which showed pus or which suggested to us pus in one kidney or in the pelvis of one kidney, that supposition being backed up by cystoscopy and later by catheterization of the ureter, and the injection of the pus in a guinea pig. Urinary examination is important but when reduced to its essentials it takes but two or three minutes. If we realize this we can do it in every case; if we do not realize it we will shirk it on some cases.

## BLOOD EXAMINATION.

Blood examination is a subject to which, as some of you may know, I have devoted a good many years of study, and I might naturally be looked to as one who would insist that you all ought to know a great deal about it and do a great deal of it; but I do not think so. As about urine so I think about blood. There are certain tests we all ought to make, but those are very quick tests, and the only test that I should say should be made as a routine is the Talquist paper test for hemoglobin. That is, to have this little book of sample colors like blood of 100 per cent, 90 per cent and down to 10 per cent of hemoglobin, and blotting paper bound up with it, into which you can soak up a drop of blood, hold it alongside the standard, and tell roughly whether there is anemia and how much. I have been roundly condemned for recommending this very inaccurate method, and I have always answered that I know it is inaccurate, but it is accurate enough for all practical purposes. What difference does it make in your diagnosis, prognosis or treatment to know whether the patient has 70 or 75 per cent of hemoglobin? It makes no difference whatever. What difference does it make whether it is 20 or 25 per cent—absolutely none, but it makes a great difference to you to know whether it is 100, 50 or 20 per cent, and those things this test will tell you as well as any other. You want to know whether there is anemia and whether there is very much anemia, and in the vast majority of cases that is all you want to know. I do that on every patient and it does not take half a minute.

Most of the people who are pale are not anemic; that is an important thing to find out, and cannot be found out except with the hemoglobin machine. Most people who are pale have a white skin, and that is all there is to it. Anemia means deficiency in hemoglobin, and they have no deficiency in hemoglobin. On the other hand some people who have red cheeks are anemic. I see men all the time cramming patients with iron and arsenic when they have no anemia. They have judged by the color of the face and not by the color of the blood. If we find a normal hemoglobin there is no use of counting red corpuscles. I have spent more hours than I would like to say in counting red corpuscles, and it is a soul-killing performance. It is rarely necessary to do it. But if you find the hemoglobin down low, then you or somebody else has got to do it in order to determine the kind of anemia. But you do not find the hemoglobin way down in one case in a thousand. Is it a rare thing to have to count red corpuscles. I very rarely have to do it myself. Aside from counting red corpuscles, we have

to count white corpuscles pretty often in the determination of the presence of concealed suppuration, as in the liver, kidney, under the diaphragm, or in the pelvis; but that is not difficult; I have not the least doubt the counting of leucocytes is of great value there.

Any one who is used to studying stained blood films can count the leucocytes accurately enough by the stained blood film, without having a machine. Personally I do hemoglobin and a stained specimen, and those things can be done in 10 minutes—the hemoglobin in one minute and the other in 9. The stained specimen tells you all the essential things about the blood aside from the hemoglobin test. It tells anemia, leucocytosis, eosinophilia, or any variety of leukemia, malaria, and those are all the things necessary to know. It is the absolute routine in the Massachusetts General Hospital that every patient must have a hemoglobin done and a stained smear done; and we do not miss much in the way of diagnosis. That can be done very quickly. So much for blood examination.

## SPINAL FLUIDS.

Now, as to the examination of spinal fluid. I was called not long ago to a patient who was said to have uremia. The physician who telephoned to me said she went to bed all right last night, and she woke up in uremic convulsions at one this morning. I got there at 8 o'clock in the morning. I doubted the diagnosis at once, because I think acute uremia, with no symptoms before it, almost never occurs. I never saw acute uremia without preceding symptoms. Eclampsia may come out of a clear sky, but uremia does not. Here was a woman well the day before, unconscious and in convulsions when I reached her. There were no lead lines in this case, and I could make no diagnosis by physical examination. I put a needle into her spinal cord, as I do in any case I cannot diagnose when the patient is unconscious. It does not hurt the patient and may help. I would say a word about spinal puncture. It is an easy thing or else impossible—one of the two. Either you can get in perfectly well or you cannot get in at all. If you do not get fluids through your needle you do not reach the cord. There is no such thing as a dry tap. There is no such thing as getting into the cord and getting no fluid. If you get into the cord you will get fluid. The first time I did this I was considerably scared. I felt I was running a very long needle into a patient's back, and wondered when I would strike the abdominal aorta. (Laughter.) When you have run a needle in 5 or 6 inches you begin to feel kind of curious as to the route; but I think it can be said that

there is no danger of striking the abdominal aorta, because if there was we would have done it before this. There is nothing to do in lumbar puncture except to find the level of the two hip bones, then start in the middle and push till you strike oil. There is nothing else to do. (Laughter.) I have watched a great many men much more skillful than myself, but it seems to me they do not know much more about it, because nobody knows much about it. In other words it is not yet a thing that we have reached any considerable skill in—or I have seen no one that has. In this particular patient I drew clear fluid, 40 c.c., and I thought probably I should get nothing out of it; but when I got home and centrifugalized it, I got polynuclear leucocytes and the diplococcus of Weichselbaum, which meant epidemic meningitis. I telephoned that they should get Flexner serum and put it in right off. She was a middle aged woman and the prognosis was bad. But they got the serum into her within twenty-four hours. She got absolutely well, and I believe that her life was saved as the result of the knowledge that came out of that lumbar puncture. I think mighty few of us medical men who do not do surgery can say that we have saved a life. I do not know of any other life that I can certainly say that I saved. (Laughter.)

Just a word about some of the newer methods of cardiac diagnosis. It amounts to this, that while they are of great interest and value in studying the physiology of the heart, and while they have added a great deal to our knowledge of the physiology of the heart, they have not, in my opinion, added anything of clinical value yet. You do not need to take venous pulses in the neck or to make electrocardiograms, in my opinion, because no one, so far as I can see from literature or study, has yet brought anything out that helps us in our diagnosis, prognosis or treatment. When they do I shall be ready to change my opinion, but it is great luck that they have not, because they are fearfully time-consuming things, and one of them is very expensive.

### X-RAY.

Some years ago I was told by a man whom I have the greatest respect for medically, that I ought to put an X-Ray machine into my office, for diagnosis—not for treatment. I did not believe him, though I generally do. Many of my friends put them in at that time; most of them have taken them out since. I do not believe we need the X-Ray as a part of routine diagnosis. I think it is a very valuable thing in certain cases, but those cases are not so frequent as to make it worth while for you and me to have things in our offices which are

constantly getting out of order and which should be left to an expert. In the hands of such an expert the X-Ray is valuable in the diagnosis of concealed aneurisms of the aorta. There are aneurisms of the aorta that cannot be diagnosed in any other way. They do not make changes in the pulse and do not stick out in the chest. They can be recognized, however, with the X-Ray and there, of course, it is absolutely invaluable.

Another point that I have got from it a number of times, which I could not get any other way, is by X-Ray of the shin bone in doubtful cases of syphilis. In a number of cases I have been put on the right tract by the X-Ray of the shin bone showing changes due to syphilis. Of course in the study of the diseases of the bones and joints such as orthopedic physicians deal with, the X-Ray is necessary all the time. But I am speaking of general practice, and in general practice it seems to me that the points that I have spoken of are the only ones of great importance. I do not think one needs it for the early diagnosis of tuberculosis of the lungs. I know that it does show lesions in some cases of tuberculosis of the lungs which might not have been suspected otherwise, but I do not think that happens often enough to counterbalance the other side of the shield, which is that it shows shadows when there are no lesions. Of course the X-Ray can make but one remark; "shadow" or "no shadow;" and that remark "shadow," is a very difficult one to interpret. It may mean something and it may mean nothing of importance.

In this very sketchy and hasty review of physical diagnosis I have tried above all to consider, as I think every man must, the needs of busy practitioners. There is no use in recommending to men things that they cannot possibly use and that take hours to accomplish. You and I as busy practitioners must use the things that we can do rather quickly. I have not recommended anything to you that cannot be done rather quickly; and I believe any man that accustoms himself to the routine and methods I have suggested, will find that he can make a physical examination on every patient the first visit, and yet not use up his whole day and drive himself to the poorhouse by trying to be unnecessarily and quixotically thorough. Thoroughness is an ideal none of us can ever reach. A thorough examination of a patient takes a week at least. The question is not of thoroughness but of common sense and differentiating what is important from what is not of importance. That is a hard question to answer, and anybody who answers it as I have is sure to be wrong somewhere. I hope that I have not been any more wrong than is absolutely necessary. (Great applause.)

# GRAVES' DISEASE (HYPERTHYROIDISM).*

BY LOUIS F. JERMAIN, M. D.,

PROF. OF MEDICINE, MARQUETTE UNIVERSITY MEDICAL SCHOOL.

MILWAUKEE.

Of the many theories advanced as to the causation of Graves' disease, the thyroid theory is the only one that has survived experimental, pathological and clinical evidence. Whether we believe with Kocher that the symptoms are due to a thyro-toxicosis, or with Mayo that they are due to hypersecretion, the fact is generally accepted that an abnormal thyroid gland is present in all cases.

The changes consist mainly in an increase in the parenchyma of the gland with evidence of over-activity of cell secretion, increased vascularity, and a diminution in colloid and iodine content. Wilson states that certain changes in the thyroid gland bear a definite relationship to the varying symptoms of Graves' disease, and claims to be able to determine the stage and symptoms of the disease from a microscopical examination of the gland structure. He further states that a large percentage of simple goiters at times show unmistakeable evidence of hypersecretion, while conversely, every case of Graves' disease is destined to revert to a case of simple goiter.

The relation of the sympathetic nervous system to hyperthyroidism has been the subject of considerable study and speculation.

Biedl in his work on internal secretions arrives at the following conclusions: "Graves' disease is caused by an excess of thyroid secretion in the system. Thyroid substance acts by irritation of the vegetative nervous system, both sympathetic and automatic, and also by influencing the action of correlated secretory glands such as the thymus, hypophysis, adrenals and the reproductive glands."

Jackson and Eastman believe that the thyroid secretion acts on the sympathetic system, perhaps directly upon the chromaffin substance and that a vicious circle is established, an excitation of the sympathetic increasing the thyroid secretion which in turn reacts upon the sympathetic system.

It is at present fairly well established that the pancreas and the thyroid mutually retard each other in action. The same may be said of the pancreas and the chromaffin system, while the thyroid and the chromaffin system stimulate the action of one another.

---

*Read at the 65th Annual Meeting of the State Medical Society of Wisconsin, Waukesha, June 8, 1911.

Crile in a fatal case of simple Graves' disease found extensive changes in the brain cells. He concludes that a pathologic reciprocal interaction exists between the brain and the thyroid gland and that this can be maintained only through nerve connection.

Successful treatment whether medical or surgical depends upon early diagnosis of the condition. The term exophthalmic goiter should be discarded as it lends the impression that these are essential symptoms of the disease, while in fact both are frequently absent and seldom present early in the affection.

The earliest and most important symptom of hyperthyroidism is tachycardia. In the absence of any cardiac or other disorder, sufficient to produce the rapid and irritable heart, this symptom is of the greatest aid in early diagnosis.

Tachycardia is the one ever-present symptom without which a diagnosis of hyperthyroidism is impossible. Palpitation noticed at first only after excitement or exertion, often combined with a feeling of suffocation and fulness in the neck, are early subjective symptoms associated with tachycardia.

Next in importance as an early symptom is loss of weight and strength. Loss of weight is constant and may amount to as much as one-third and even one-half of the original body weight.

Excess of thyroid secretion renders the assimilation or retention of carbohydrates difficult and the nitrogen requirement is very much increased. It is therefore difficult to feed such patients a sufficient quantity of any kind of food to entirely prevent nitrogen loss. Coincident with loss of weight, nervousness, a frightened, unsteady appearance, irritability, vasomotor disturbances, heightened sensibilities, insomnia and menstrual disturbances develop.

These symptoms may and often do precede the development of exophthalmus, struma and tremor by a considerable period of time, and constitute a type recognized long ago by French writers as "larval types," "formes frutes" of Charcot.

A better understanding of these mild types of thyroid disorders will considerably diminish the ranks of our hysterics and neurasthenics and afford relief to many of the disturbances of the climacterium.

We should bear in mind that during the sexual life of a woman she is constantly predisposed to thyroid intoxications and that only careful search will reveal the true condition.

The classical case of Graves' disease is easily recognized, not so the larval form and yet it is just in this type that the most satisfactory therapeutic results can be obtained.

The administration of thyroid extract is a valuable aid in the diagnosis of the early stages of the disease. Obscure cases of hyper- as well as hypo-thyroidism can in this manner be recognized and promptly controlled by appropriate treatment.

The remarkable results often obtained by the administration of thyroid extract in chlorotic girls suffering from amenorrhoea can indicate but one thing,—that the condition is one of hypo-thyroidism. In like manner an aggravation of all symptoms in a suspected case of hyperthyroidism, through the administration of small doses of thyroid substance, must mean thyroid intoxication.

Thyroid secretion has long been known to exercise a profound influence over the female genital organs. Graves' disease is a disease of the sexual age. Most cases occur between the ages of 16 and 40 and its development after 50 is exceedingly rare; furthermore the proportion of women to men is 8 to 1.

Enlargement of the gland during menstruation and pregnancy, the improvement which frequently results in the symptoms of Graves' disease during pregnancy, and the disturbances of menstruation, amenorrhoea, less frequently menorrhagia, all indicate a definite correlation of function between the reproductive organs,—at any rate in the female,—and the thyroid gland.

Goodall and Conn point to an antagonism between the secretion of the thyroid gland and the ovary. "Over-activity of the ovarian secretion whether chemically normal or perverted calls forth a greater thyroid activity to neutralize its effect upon the organism.

Alvarez and Pinard have reported a number of cases directing attention to the frequency of association of menstrual disturbances and perverted thyroid activity. Pinard believes that defective ovarian function and the consequent disturbed uterine function is the cause rather than the effect of over-activity of the thyroid.

The most difficult of recognition and classification are the thyroid disturbances occurring before or at the time of the menopause. It is at this time of life that the degenerative and retrogressive changes in the gland are most apt to occur giving a complex and varying clinical picture ranging from Graves' disease, through a mixed indefinite picture, to typical myxedema.

Alvarez says, "It is entirely probable that the thyroid secretion is composed of various elements, and that some may be diminished or absent, while others are normal or over-active. This can help us to understand those puzzling cases in which the symptoms of hypo- and hyperthyroidism are plainly present at the same time."

The blood changes in Graves' disease according to Kocher are early and characteristic and consist in slight increase in red cells, moderate leucopenia, marked reduction in polymorphonuclear leucocytes, and an absolute and relative increase in the lymphocytes. These changes appear to keep pace with the loss of weight and probably are dependent upon the increased metabolic changes and loss of nitrogen balance.

In view of the brilliant results achieved through medical treatment by such men as Jackson and Mead, Forchheimer, Rogers and Beebe; and the large percentages of recoveries after operation by Kocher, Mayo, Crile and others, we must admit that both medical and surgical treatment find indications in carefully selected cases. The matter of selection is the all important one. Are the indications for surgical treatment in a given case sufficiently clear, and if so, is the patient in condition at the time to assure recovery from the immediate effects of the operation?

All cases of hyperthyroidism are borderline affections in which intelligent and conscientious co-operation between the surgeon and the internist not only will accomplish the best results, but will lead to a fuller appreciation of the merits of each particular line of treatment, and more careful selection of cases where surgical intervention is safe and productive of relief.

In the milder cases medical treatment is usually sufficient if the patient can spare the time necessary for such treatment. In the neglected, severe and acute cases, the care must be combined medical and surgical. Medical treatment is necessary before operation, and medical attention after operation.

Crile says,—"Patients with Graves' disease are specifically hypersensitive to trauma, to psychic stimuli, and to thyroid secretion. When operated upon and then immediately returned to the environment that originally produced the disease, they frequently relapse. Patients operated upon and then given a prolonged rest cure,—which alone can repair the damage to the brain cells,—are nearly all cured. It requires approximately the same length of time to recover from exophthalmic goiter as it does from a nervous breakdown from other causes." He believes that a combination of surgery and an adequate rest cure is the method of choice and will cure most cases. He further says,—"Operation is only one phase of the treatment. The rest cure and after care are other phases, and it takes from two months to a year and even more before these patients can be said to be cured, and unless they are completely cured at the first trial they are more difficult to treat when a relapse has occurred.

Jackson reports 56 cases of Graves' disease under observation for from 3 to 9 years. 76 per cent had had no signs and symptoms for 2 years; 13 per cent had been benefited and only 11 per cent were considered failures. He says that the early cases do best under medical treatment and that only in advanced cases with organic changes in the heart a cure can not be expected, but improvement results.

During the last six years I have had under my care and observation 38 cases of hyperthyroidism. 22 of these presented the typical syndrome of Graves' disease, while in 16 there was much evidence of thyroid intoxication although the usual cardinal symptoms of Graves' disease were absent. Of the 38 cases 34 were women and 4 men. The youngest patient was a girl of 15 and the oldest was a woman of 58. All of the 16 cases of mild hyperthyroidism were women. Of the 34 female patients 20 had menstrual disturbances of some kind. Six of the 20 were girls between the ages of 15 and 18 and of these 4 suffered from amenorrhea and 2 from menorrhagia. Eleven of the 20 were women between 40 and 48 suffering from what are usually considered disturbances of the menopause, such as palpitation, tachycardia, loss of weight, nervousness, sensation of heat and hot flashes, glistening sclera, restlessness and insomnia.

Of the eleven women suffering from the above disturbances, 8 were temporarily given thyroid extract with a view of determining the nature of the symptoms, and in every one marked aggravation resulted even from such small doses as ½ to 1 grain of the dessicated thyroid three times daily. Nine of these were troubled with menorrhagia while in two menstruation had ceased. Four cases were women beyond the menopause in which such symptoms as marked and rapid increase in weight, mental dullness and dry skin in association with tachycardia, struma, and exophthalmus pointed to a mixed type of thyroid disorder.

These 38 cases were all treated for greater or less periods of time by the Forchheimer method, viz.: the administration of neutral quinine hydrobromide with or without ergotin, combined if necessary with rest and forced feeding. The quinine was given in 5 grain doses three times daily unless tinnitus was complained of, in which case only 2 doses were administered, until such time as they become more tolerant of the drug when 3 or 4 doses could be given without ill effects. Ergotin in the one grain doses was combined with the quinine in all cases in which vascular disturbances were marked. It was found that the disagreeable pulsating, throbbing sensation in the vessels was most effectively controlled by this combination. Cases suffering from

profuse menstruation were given in addition calcium lactate with most gratifying results.

In the milder cases of hypersecretion these remedies combined with a moderate amount of rest were sufficient to improve the condition to such a degree that in from 4 to 8 weeks the patients were enabled to resume their accustomed duties, practically free from their annoying symptoms.

Relapses occurred but they were easily and promptly controlled, by the quinine.

Some of these patients have been taking the quinine more or less continuously for three and four years without any ill effects; and many of them have become so convinced of the potency of the drug that they would not feel at ease for a single week without it.

In the severe cases absolute rest in bed for a considerable time is essential to the success of the treatment. The rest must be mental as well as physical and if possible the patient should be placed in charge of a competent nurse, with specific instructions in this respect. This is the most difficult phase of the treatment and the one to which the most objection is raised on the part of the patient.

In addition careful attention must be paid to the nutrition of the patient. The success of the treatment is only assured if a steady and continued increase in weight is apparent while the patient is in bed.

Of the 22 cases of typical Graves' disease 4 resisted this method of treatment. Three of these were operated upon and subsequently with medical treatment made a good recovery. One was refused operation because of bad condition of the heart and marked psychic disturbances; this patient died without at any time having been benefited by the treatment.

Ten of these 22 cases have been under continued observation for from 2 to 6 years. All of them have recovered sufficiently to permit them to resume their occupations.

It is questionable if an absolute and complete recovery ever occurs. I have never seen one either through medical, surgical or the combined treatment. Relapses occur even when considerable of the gland has been removed, through hyperplasia of the remaining gland structure. Even in the apparently recovered careful examination has always revealed an irritability of the heart and vaso-motor system quite incompatible with perfect health.

## SUMMARY AND CONCLUSIONS.

1. Graves' disease is due to thyroid intoxication. This view is supported by all scientific evidence at present obtainable.

2. The sympathetic nervous system plays an important role in the symptomatology of the affection.

3. Early diagnosis is of great importance if results from treatment,—whether medical or surgical are to be obtained.

4. Many of the milder types of hyperthyroidism are constantly mistaken for anemia, chlorosis, hysteria, neurasthenia and disorders of the menopause.

5. The best results are obtained by medical treatment in the milder cases and a careful co-operation between the surgeon and internist in the severe ones.

6. In all the milder types of Graves' disease the Forchheimer treatment gives very satisfactory results.

## REFERENCES.

Wilson—Am. Journal Med. Sciences, Vol. 136-P. 851.
Biedl—Inner Secretion, 1910.
Jackson & Eastman, Boston Med. & Surg. Journ., Sept. 15, '10.
Crile—Jour. Am. Med. Assn., Mch. 4, 1911.
Goodall & Conn—Surg. Gynecol. & Obstet., May, 1911.
Alvarez—Am. Jour. Med. Sciences, July, 1910.
Pinard—Annals de Gynecol. & Obstet., May, 1909.

### Discussion.

Dr. J. L. Yates, Milwaukee: In order to attempt to make clear the view point of the surgical indications I should like to go into detail regarding the pathology and abnormal physiology in connection with goiter in general and Graves' disease in particular.

Marine's very brilliant results derived from experiments on animals,—mammals and fishes, point to this fact: diffuse small thyroid enlargement, known as the small diffuse goiter, comes to its development through alternating cycles first of hyperplasia, and second a return to the resting stage of colloid goiter. The first is probably due to the call by the general body upon the thyroid for increased secretion. Wilson has observed at Rochester that he finds areas of these hyperplasias, speaking for increased secretion. Marine's work shows this detail, that during the time of increased secretion and hyperplasia if iodin is supplied to the organism, in not too large doses, in order to take off part of the strain of the thyroid gland, he can assist very definitely the return of the hyperplastic stage into the colloid goiter type. In this connection it is important to recognize another fact. There is a definite distinction between hyperthyroidism due to the intrinsic hyperplasia and hypersecretion of the thyroid gland and hyperthyroidization, the latter being due to the over feeding of thyroid extract to any animal, including man. Hyper-

thyroidization is characterized by the fact that as soon as the over feeding is discontinued the animal, mammal or fish will return to the resting stage. That is important in the later consideration of expectant treatment in Graves' disease. In Graves' disease it is recognized that there is diffuse hyperplasia of the gland. Kocher has pointed out that the gravity of the symptoms were in inverse relation to the mass of the colloid material, but not so with the iodin content of the gland.

Now, the active principle of the secretion is probably the well-known hydrothyradin poured out in response to definite stimuli. The secretion of the Graves' gland seems to be a definitely distinct compound, which Klozo calls iodin van Vazidof, characterized by this fact, that its iodin is so loosely bound in the compound that it is readily given up to the tissues as inorganic iodin, and has the same effect on tissues as the injection of inorganic iodin intravenously.

As Dr. Jermain has pointed out, there is a definite relationship between increased thyroid activity and daily life. The energy of the thyroid gland is increased by anything that increases metabolism, for instance, in the case of gestation or severe infectious diseases. When the person is unusually irritable or susceptible to irritation, then the normal thyroid activity becomes abnormal, and the symptoms of hyperthyroidism are established.

In another way the symptoms of hyperthyroidism are established: by the ingestion of faulty food, or the well-known effect of certain waters, and particularly the over-cowding of iodin in a susceptible individual, and no individuals are so susceptible to iodin as those with goiter, either in the resting stage or the hyperplastic stage. Kocher, who has had great clinical experience, has come to the conclusion that there are four main underlying causes of hyperthyroidism or Graves' disease, as follows: (1) Severe disturbance in equanimity. (2) Long continued psychic disturbances, usually very severe, (3) As the result of the iodin treatment of simple goiter following infectious diseases, and (4) as the result of over-stimulation of the sexual glands. All these points Dr. Jermain has brought out, but the one in particular, the disagreeable psychic stimulation, is unduly accentuated by Crile.

Graves' disease may be looked upon as a vicious circle, comparable to the pinwheel, which is ever widening, and as it widens it increases its malign influence on the tissues, as manifested by the blood changes and more especially by the blood pressure, as shown in adrenal anemia, as shown by increased secretion of adrenalin in the circulation. It is not necessary to mention the untoward efforts of adrenalin on the general organism.

It is in the early period of the history of this disease, as Dr. Jermain has stated, that a cure is possible. There has not as yet been established lasting severe injury to the different cells making up the organism. As the vicious circle extends, these changes in the different structures of the body are established and become progressively more severe and more permanent. The changes in the heart muscle, and the changes in the central nervous system, particularly in the cells of the cerebellum, have been brought out well by Crile; and when these changes are once established the recovery is impossible. The disease may be arrested, but a return to normal is quite as impossible as a return to normal of a person with amputation.

In regard to the occurrence of symptoms of hyperthyroidism invariably with hyperplastic changes in the thyroid gland, I think that that can be dis-

puted, for the reason that in a certain number of cases under Crile's treatment in Cleveland, and where Dr. Marine has had opportunity to examine all this material, he has observed that the symptoms have been observed clinically and diagnosis of hyperthyroidization made clinically, and on examination the gland is found to be histologically normal. That points to the fact that the thyroid gland is an important point in the vicious circle, but not the most important point always.

We should consider the interruption of the circle by taking the strain off the thyroid gland, if it can be done early enough to protect the general organism; but if these changes have become so well established that hyperthyroidism is thorougsly established, then surgical treatment is indicated; and Kocher is right when he makes this statement that once established hyperthyroidism is a surgical disease, and subject only to surgical treatment. I think we can take this one exception to Kocher, and that is that early in the disease it is not surgical, and it does not become surgical until we have become convinced after a careful observation of the individual, that progress in the disease cannot be stopped by the expectant treatment. If that point has been realized the sooner operation is done the better: (1) The operation is easier, (2) less dangerous, (3) results are more certain.

One point in connection with expectant treatment which is rank heresy, which, however, on the basis of Marine's observations merits due consideration, is this: In his experimental work, as nearly as he could, he has imitated Graves' disease in animals, and found out that by underfeeding thyroid extracts below the point where the ingestion of thyroid extract produced any symptoms or exacerbation of symptoms, and continued at that stage and gradually increased, he could get the goiter back to the colloid type. My idea was to give two or three grains three times a day. Marine gives a quarter of a grain once a day, and may keep the people under other treatment on that dosage for a week or ten days without increasing the dose. A quarter of a grain may be too much, but he has found in the severe cases that are almost certainly unfit for surgery that rest in bed with this treatment makes them good surgical risks.

In regard to the surgery itself of the thyroid gland, it is no place to discuss details. We may take, however, some beneficial lessons from the experience of Kocher and Halsted, who made some important suggestions at the recent German Surgical Congress. Both agreed that it was impossible to determine the amount of thyroid necessary to exise in order to get a cure. That, as a general proposition, the more gland excised the greater and more immediate the amelioration of the symptoms. Halsted in addition has made this provision, that in removing as he does first the right lobe, instead of excising very close to the vessels, he leaves there a node of thyroid tissue, for two reasons, one that he may have guaranteed to the patient the functional preservation of the integrity of the parathyroid; and above all, if it is necessary to go back for more tissue, as is often the case, the material is there, and the same operation can be done on the other side, with enough thyroid left to run the body, with absolute provision for parathyroid function; and Halsted found that in sacrificing parathyroids on the right side and thinking he preserved them on the left side, that there were developed terrible consequences of the absence or insufficiency of parathyroid secretion.

And above all, surgeons must remember that surgery and particularly

surgery of the thyroid, is but an incident in the treatment. It is not a cure-all,—as Dr. Jermain has emphasized. Those cases must be continued on medical treatment, on expectant treatment, preserved from all unpleasant physical and mental stimuli, not only until their symptoms have shown definite arrest, but beyond that point to the point where you feel reasonably sure that the arrest is permanent. (Applause.)

Dr. W. H. Washburn, Milwaukee: Nearly all the aspects of this subject have been so well covered by the previous speakers, that I find it only necessary to call attention to what must, I think, strike any one who undertakes to study this question, and that is first the enormous literature of the subject. At the present time there are more than 2,500 in the bibliography, of Graves' disease, which alone is sufficient to indicate the fact that the whole question is in a very unsettled condition.

And the second is the great variety of different methods of medical treatment, all of which have been reported by the men who write on the subject who have been about equally successful in the management of the cases, although dictated by very different theories.

For example, to briefly mention some of these, it has been found that there is an increase in iodin in the glands in cases of exophthalmic goiter, and this has resulted in the treatment of the disease with sodium sulphanilate, which increases the elimination of iodin, and the results from this treatment are reported to be very good.

Next that there is in Basedow's disease a lack of arsenic in the gland which is normally present there, and the treatment of a large number of cases with Fowler's solution or Clemen's solution is reported to have resulted favorably.

Again that in cases of this disease there is an excess of elimination of phosphorus, and therefore phosphorus needs to be supplied; and this is done by the administration of the sodium phosphate; and as a result of this line of treatment we have a great many successes.

Then again, that it is due to intoxication from the gastrointestinal canal, and in order to obviate this, treatment having for its object a lessening of this toxemia has resulted likewise in a great number of cures, especially sodium salicylate. A few years ago, two or three years ago, I reported to this society the treatment of nine cases with sodium salicylate, with nine cases of apparent recovery, and so far as I know they have remained recoveries up to the present time.

Then successes have been reported from the administration of thyroidectin derived from thyroidectomized animals; likewise the use of milk from thyroidectomized goats.

In view of the degeneration found in some of the sympathetic ganglion cells, Jannesco of Bucharest devised the operation of sypathectomy and reported cures.

In view of the fact that degeneration of the parathyroid glands has been found in many cases, the patients have been treated with parathyroid feeding, with successful results.

Dr. Jermain spoke of the difficulty of carbohydrate assimilation. The man that reports the largest number of cases treated medically says that the disease is absolutely due to nitrogen mal-assimilation, and that no case of Basedow's disease can be treated successfully except on an absolutely meat-

free diet. He wrote a little monograph on the subject which was published three or four years ago, and within the last two years has written a supplementary article published in the American Journal of Medical Sciences, in which he reported a number of cases of relapse among his former patients, in every case due to returning to a meat diet, and he says in his last paper that the kind of patient that he desires most to have come under his care are those that have reached the stage so advanced that the surgeon is free to operate on them; that if he can get the patient at that stage and put him on his meat-free diet that the chances of recovery are very great indeed.

So you see what an unsettled condition the therapeutics of exophthalmic goiter are in.

During the last few years I have had under my care, either directly or indirectly 22 patients suffering from this disease in a greater or less degree of development; and my conclusions from these few cases are that the patients in whom the disease is well advanced where there is a large goiter, an exophthalmos and all the other symptoms are marked, do not respond to any internal treatment whatever; and I have tried pretty nearly all the methods that have been advised.

Three of my patients have died, one being a woman and two being men. Out of the 22 patients three were men. Two of the men are dead and one of the women.

I was interested in what Dr. Yates stated with regard to the normal histological findings in some of the cases that had been operated on, for I found in the literature that cases of exophthalmic goiter have advanced to a fatal issue where the post mortem examination revealed the fact that the thyroid had undergone atrophy to such an extent that there was practically no thyroid there at all, and I think that the thyroid does atrophy in advanced life any way, and it is likely to be found that the thyroid has atrophied in cases in advanced age. The oldest patient I have seen with this disease was 55 years of age, and that woman made an apparently perfect recovery on the use of salicylate of soda.

During the last three years I have treated all of the cases that have come into my care with the modification of the treatment that Dr. Jermain has discussed more in particular, and that is the Forchheimer treatment, which involves the administraton of hydrobromate of quinine. I have treated 9 patients on this plan, with the addition that they were put on a vegetarian diet, a meat-free diet, and only allowed eggs and milk as a source of nitrogen; and of these 9 cases one has been lost sight of and two of them have apparently recovered. One was in a woman that developed the symptoms after a miscarriage which was followed by infection. One of the patients did not respond to treatment at all and was operated on, and the operation, I understand, has not been followed by very much improvement. In that case the symptoms were rather mild, and I was surprised that the patient was willing to submit to an operation. One other patient has been operated on. The third man was a rather mild case; he was operated on a year ago last February, and has apparently been well ever since; and one other patient has been operated on and the year afterwards was married.

I have reached the general conclusion that a patient who has the symptoms of the disease well marked and who fails to respond very markedly to internal treatment after a month or two at the outside, should be turned over to the surgeon. (Applause.)

Dr. K. O. Thienhaus, Milwaukee: It is deplorable when Kocher states that by surgical treatment 80 per cent of cases can be cured, that patients are allowed to die under internal treatment. Aulenberg has given us his results with internal treatment, and he states that 30 per cent of the cases are reasonably cured.

When a case which you have had under medical treatment for two or three months, shows no improvement or the symptoms reappear after apparent improvement, that case belongs to the surgeon beyond question. If there is no surgeon in your own locality skilled in this procedure, by all means insist on the patient being sent to a man capable of operating in this condition; for statistics show 80 per cent of recoveries through radical operation.

Dr. Yates' discussion of the technique of operation is highly interesting, especially with reference to how much of the gland should be removed. I think it is the consensus of opinion nowadays that we should remove (as Dr. Yates has said) as much of the goiter as possible, and as for myself I always remove the right middle lobe entirely.

I have had no personal experience with the use of the X-Ray in the reduction of the thyroid gland; but if untoward symptoms recur after operation, some surgeons advocate the reduction of what is left of the gland on the left side, by means of the X-Ray.

When I see a case showing the symptoms of Graves' disease, and it has been treated, or the gland is very much enlarged, I advise an immediate operation.

I saw such a case in consultation in Columbus, where I was called in consultation for another disease, which was operated on for abscess two years before. The doctor asked me to examine the patient. He had a pulse of 140. I looked at his eye and asked if he had enlargement of the thyroid gland. He said yes. That was a case of Graves' disease. I advised immediate operation for the thyroid gland first and afterwards for the hernia from which the man suffered,—which was done.

After thyroidectomy was performed the pulse fell to 80 where it remained; and the hernia was operated on radically 6 weeks after the first operation.

---

# SALVARSAN AND ITS USE IN THE TREATMENT OF SYPHILIS.*

BY O. H. FOERSTER, M. D.

MILWAUKEE.

The first decade of the new century will remain memorable in the history of medicine because of its brilliant revelations regarding syphilis. Within the past few years much of the mystery which had enshrouded this disease has been cleared away. The experimental production of the disease in 1903 was soon followed by the discovery of the

*Read before the Ninth Councilor District Medical Society, at Grand Rapids, Wis., July 27, 1911.

Spirocheta pallida as the causative agent, thus placing syphilis among the chronic spirilloses, and shortly thereafter a method of serum diagnosis was established. It was believed by many that these discoveries would logically lead to the production of a specific sero-therapeutic agent, but attempts in this direction were barren of results. The final solution of the therapeutic problem of syphilis marks an epoch in medicine, for it is based upon a new principle in therapeutics, chemotherapy, as evolved by the genius of Ehrlich.

Early in his work Ehrlich had found that certain dyestuffs showed a typical selective action in the tissues. As a result of his researches in pharmacology and studies in serotherapy he assumed that chemical substances or drugs were likewise attracted to cells, and bound to them by definite atom groupings, which he terms chemoceptors. Consequently when a chemical substance is introduced into an animal body it is unevenly distributed among the tissues, due to differences in attraction or affinity of the tissues to the chemical. If an animal body into which the chemical is introduced contains pathogenic micro-organisms which possess specific chemoceptors, or an especial affinity for the chemical substance, or if they possess a greater number of receptors than do the cells of the host, the chemical will be attracted to and fixed only in these organisms or in greater proportion than in the cells of the host. If this union of chemical substance and micro-organism is of such a nature as to result in the destruction of the latter, the animal body is thereby freed from that particular organism without injury to the host.

Acting upon this principle in the attempt to solve the therapeutic problem of syphilis it was necessary to find a substance so proportioned as to exert a sufficiently powerful therapeutic effect without at the same time proving injurious to the host. Compounds of arsenic were first investigated with reference to their action on trypanosomes, and it was found that atoxyl, though actively parasiticidal was equally attracted to certain portions of the nervous system of the infected animal, thus making its use impossible. The recognition by Ehrlich of the chemical constitution of atoxyl allowed the sustitution of numerous derivatives, all of which were found unavailable until arsacetin and arseno-phenylglycin (the 418th of the series) were produced. Arsacetin though actively parasitotropic also exhibited a marked affinity for the nervous system and had to be abandoned.

A further condition prohibiting the use of these products of arsenic was found to be that those trypanosomes which escaped destruction became completely resistant to the further action of arsenic, and then transmitted this resistance to their descendants, so that

arsenic-fast strains of trypanosomes resulted. It therefore became necessary to produce a compound which would completely destroy all the parasites with the first dose, and yet leave the tissues uninjured. It was at this time that Ehrlich began to investigate the action of his arsenical series on spirilla, and found that arseno-phenylglycin exhibited marked effects on the spirillum of relapsing fever. But until the 606th compound was obtained the desired goal had not been reached.

Ehrlich found that this 606th product—dioxydiamido-arsenobenzol or salvarsan—when injected into various species of animals harboring various forms of spirilla, completely destroys the organisms without injury to the host, and thus seems to meet the conditions required of a specific.

Hata's experiments on animals showed an absence of toxic effects on the optic and vestibular nerves and on other parts of the nervous system, such as had followed the use of atoxyl and arsacetin. He also found that in rabbits inoculated with syphilis one-tenth of the maximum tolerated dose will cure the disease in from two to three weeks. The drug is not regarded as very toxic in as much as 0.15 gram per kilo given subcutaneously is readily tolerated by monkeys.

It remained to be seen if the facts obtained by animal experimentation in the laboratory could be reproduced in the human organism when the subject of spirillar infection. For this purpose the new chemical was placed at the disposal of clinicians having suitable opportunities for such tests. The results obtained were nothing short of astounding. The use of salvarsan in relapsing fever, in which the recurrens spirillum is found chiefly in the blood, resulted in complete destruction of the organisms and rapid cure of the patient after a single intravenous injection. The reports of Iversen covering a large series of these cases are decisive.

In the first series of cases of syphilis in which salvarsan was used its remarkable effect as a spirillicide was at once apparent. The spirochetes disappeared from primary lesions, mucus patches and condylomata vanished within a few days, and the lesions themselves were healed with incredible rapidity. Muscular and papular eruptions proved more resistant and the glandular enlargements were resolved slowly. Ulcerative tertiary lesions, however, without regard to extent or duration, were healed with a rapidity and completeness that was almost miraculous. The effect on the general nutrition and mental state, especially of cachectic patients, was likewise pronounced; rapid gain in weight, disappearance of anemia, return of strength, and a disappearance of mental depression were regularly noted. These early

results at once stamped the new remedy as a true specific, and it is no cause for wonder that the enthusiasm was intense. It was hoped that the complete sterilization of the human organism would be accomplished with one dose of the drug, as had occurred in animal experimentation with syphilis and in relapsing fever in the human being. But the problem proved to be more complex with human syphilis, and it soon became apparent that the disease could not be permanently eradicated by a single dose of salvarsan. That this result may, however, be attained in exceptional and isolated instances cannot at present be denied, as a number of cases have been recorded in which no further symptoms have appeared and the serum reaction remains constantly negative. In addition, recently an undoubled instance (Krefling, Deut. Med. Woch., 31, 1911) of reinfection with syphilis, (chancre, spirochetae, secondary eruption, Wassermann positive), has been recorded after the first infection (chancre, spirochetae, Wassermann negative) had been successfully eradicated by three intravenous injections of salvarsan.

During the past year the literature of salvarsan has grown by leaps and bounds, the subject has been discussed by almost every medical assembly, and more or less definite opinions regarding it have gradually been formulated. But a final conclusion has not yet been reached. We are at present in a period of revision as to dosage, mode of administration and its technic, while the indications for and against its employment are being more sharply defined. The therapeutic limitations of the drug as employed at present are being recognized without however detracting from its value as the most powerful single agent in our possession with which to combat syphilis. It now appears to be a question of adjustment whereby it will be possible to utilize to best advantage the combined therapeutic power of the new remedy and that of mercury and iodin, one complementing the other.

As regards the dose of salvarsan those having the greatest experience are apparently agreed upon the standard dose of 0.6 gm., under ordinary conditions, as therapeutically efficient and at the same time harmless. This amount is given as an intragluteal injection in alkaline solution deep into the muscle, and may be repeated after six to eight weeks. In introducing the drug subcutaneously a smaller dose is given—from 0.2 to 0.4 gm.—the injection being placed into the loose tissues of the upper back. But this method has fallen into disfavor owing to the large percentage of necrotic abscesses and nodular tumefactions which result. Meltzer (Journ. A. M. A., June 10, 1911) has proposed a modification of the intramuscular method in that the single large dose be replaced by repeated injections at regular intervals

of small doses of a very dilute solution into the lumbar muscles. Intravenous injection of the drug has recently gained in favor in this country, where formerly the intramuscular method was followed almost exclusively, and at present Ehrlich strongly urges that the intravenous injection should be the method of choice. Those who have made use of it find it difficult to revert to the painful and disabling intramuscular method except for special reasons. The usual dose given intravenously is 0.4 gm., though this has been exceeded without deleterious effect.

The mode of preparation of the drug for injection is of prime importance, for not only the comfort of the patient but also the therapeutic effect are in large measure dependent upon the care taken in its preparation. It is now generally conceded that the alkaline solution is preferable to all others for intramuscular injection. The method followed by my associate, Dr. C. A. Baer, and myself, which has given uniformly satisfactory results, is as follows: The salvarsan is shaken into a sterile 25 c.c. ground glass stoppered cylinder. Then 10 c.c. hot sterile distilled water are added and the cylinder is shaken until the solution is perfectly clear. A normal solution of NaOH is now added drop by drop and the cylinder frequently shaken until the flocculent precipitate is entirely thrown down. Then the normal NaOH solution is further added drop by drop, with frequent shakings of the cylinder, until the solution is entirely clear. The NaOH solution must be carefully added drop by drop so that there is no more excess of alkali than absolutely necessary for clear solution. The cylinder is then filled up to the 20 c.c. mark with hot sterile distilled water. Of this mixture 10 c.c. are injected into each buttock.

In the preparation of salvarsan for intravenous injection we have successfully followed a method for which I am indebted to Dr. John A. Fordyce of New York. It is as follows: the contents of an ampoule (0.6 gm.) are emptied into a sterile glass cylinder graduated to 300 c.c. and containing about 100 c.c. of hot sterile distilled water. Any particles of salvarsan adhering to the mouth or neck of the cylinder are washed into the cylinder by an additional small quantity of sterile distilled water. The cylinder is then tightly stoppered with a ground glass stopper and its contents are thoroughly shaken until the salvarsan has gone into complete solution. Then a normal NaOH solution is added drop by drop, with frequent shakings of the cylinder, until a milky mixture results. Then the NaOH solution is added further drop by drop, with thorough shaking of the cylinder after the addition of each drop, until the solution is perfectly clear. No more NaOH than absolutely necessary should be added. Then hot sterile distilled

water is added to make 300 c.c. of solution. 50 c.c. of this mixture contains 0.1 gm. salvarsan.

It is important that the distilled water be freshly prepared and boiled shortly before using, and that the solution with salvarsan be of about body temperature, for the constitutional reaction to the injection is definitely influenced by these factors.

We also prepare a 0.9 per cent sodium chloride solution with fresh sterile distilled water, brought to the boiling point and allowed to cool to about body temperature just before using. This solution is used to flush the tubing and detect leakage, and also to demonstrate that the needle is accurately located in the vein, thus preventing accidental infiltration by the salvarsan solution which follows.

The immediate effects of an intramuscular injection into the buttock consist of more or less pain, either localized as a sensation of burning and tension, or extending down the leg and of a neuralgic character. At times it is sufficiently severe to require morphine hypodermically. The individual nervous temperament appears to exercise a considerable influence in regard to the amount of pain experienced. The pain may appear early and rapidly disappear, or as usually occurs it begins several hours after injection and subsides on the third day, leaving a feeling of soreness for a variable period thereafter. Swelling begins on the second or third day and increases during the next week, after which it gradually subsides. Tenderness is noted early, along with hyperemia of the skin overlying the deposit, but within a week both have usually disappeared. When one reflects that the deposit is virtually a coagulum of the muscle, surrounded by a zone of reactionary tissue, the comparative comfort of many cases is remarkable. The general symptoms usually consist of a rise of temperature to 100½° or 101° F., with a corresponding increase in the pulse rate, and some malaise, headache, anorexia, and very exceptionally nausea and diarrhea.

When skilfully made the intravenous injection is followed by no local results other than a slight sensation of soreness at the point of injection which disappears within twenty-four hours. The general symptoms quite uniformly consist of a sensation of chilliness appearing within an hour or two after injection and lasting for from fifteen minutes to one hour. It is exceptional to have a distinct chill. The temperature then rises to 99½° of 100½° F., occasionally higher, and within twelve hours returns to normal. With the exception of slight nausea, headache and anorexia there are usually no further symptoms. But at times the patient may experience a severe chill, followed by high fever, with vomiting and diarrhea. Fordyce

(New York Med. Journal, May 6, 1911) has several times observed a subnormal temperature, and in one case a slowing of the pulse to 42 from fifteen minutes to half an hour after the injection, gradually becoming normal again.

Salvarsan is eliminated chiefly through the urine and only in small amount through the bowel. The rapidity of its elimination varies with the method of injection. If given intravenously elimination is almost complete in two or three days, though it can still be detected in the feces on the sixth day. Bornstein (Deut. Med. Wochenschr., Jan. 19, No. 3, 1911) has shown, however, that the largest part of the dose given intravenously does not remain free in the blood but is deposited in the liver, spleen, and kidneys. After intramuscular injection it can still be detected in the feces on the tenth day according to Fischer and Hoppe (Muench. Med. Woch., No. 29, 1910), and Greven (Muench. Med. Woch., No. 40, 1910) claims that its elimination is not complete until the eighteenth day. Bornstein claims that arsenic can not be detected in the urine for a longer time than three weeks after subcutaneous or intramuscular injection, although it remains in the internal organs for months afterward.

It was found early that salvarsan to be effective in controlling and curing syphilis would have to be given in more than one dose. It was also determined that salvarsan and mercury combined, that is administered consecutively, gave better results than either drug when used alone. At the present time the principal question awaiting solution is that of standardizing the manner of administration. The evidence now available clearly shows that a repetition of the dose of salvarsan is desirable in all stages of syphilis, and Ehrlich himself advises that salvarsan should be supplemented by mercury. Many of those most familiar with the action of the remedy have concluded that the best results in the treatment of syphilis in the light of our present knowledge will be obtained by adherence to a general plan as here outlined, modified to meet individual conditions. In the case presenting only an initial lesion, or an initial lesion with secondary eruption seen early, the lesion is excised if situated favorably for excision, or destroyed by cauterization. An intravenous injection of salvarsan is given, followed by a thorough course of mercurial inunctions or injections for a period of from four to six weeks. A second intravenous injection of salvarsan is made at this time and again followed by a course of mercury over a period of from four to six weeks. During the next six weeks treatment is withheld and at the end of this period a Wassermann reaction is made. If this is positive mercurial treatment is again resumed, to be preceded, in the opinion of some writers,

by a third intravenous injection. Our personal preference under the given condition would be to treat energetically by injections of mercury salicylate and to refrain from the use of salvarsan until a later time. If the Wassermann reaction proves to be negative it is considered advisable by some to hold the patient under observation for six to eight weeks without further treatment and to repeat the test at the expiraion of this time. As long as the serum reaction continues negative, no treatment is given. In the event of a negative outcome of the first serum reaction our personal view of the situation would at present lead us to recommend a continuance of mercurial treatment, and to combine this at the end of about six months with potassium iodid, for in our opinion every case of lues should at some time after the sixth month receive the benefit of treatment with iodid. If the continuance of a negative serum reaction is to be the criterion of the effect which treatment has had in a given case, we can see no reason, especially in view of the uncertain state of the therapeutic situation as it exists to-day, for not definitely maintaining it in this negative state by treatment continued throughout the first year after infection. The adversary we intend to overcome has been recognized for centuries as a wily and dangerous foe, and though we are now provided with improved and more powerful weapons of attack it appears to be courting danger to rest on our arms after only a short struggle. That distinct danger attends the policy of inaction after a short course of treatment early in syphilis, appears proven by the accumulated evidence regarding the occurrence of so-called neuro-recidivs, that is, instances of fresh syphilitic neuritis, which have occasionally followed (less than one in a thousand [Schamberg, Journ. A. M. A., May 20, 1911]) the cessation of treatment after only a single dose of salvarsan. Ehrlich attributes this neuritis to the focal recurrence of a few spirochetes which have escaped the action of salvarsan and become encapsulated within the narrow osseous canals where slight lesions produce marked clinical symptoms. That they are of luetic origin and not the expression of an arsenical neuritis is proven by their disappearance after a second injection of salvarsan or the use of mercury or of mercury with iodid.

The continuation of treatment throughout the first year after infection may be looked upon as another way in which to fight windmills, but it appeals to us as erring on the side of security. A much longer interval of time must elapse before a definite decision can be reached regarding the completeness and entire safety of the shorter period of treatment as outlined above.

Patients presenting later secondary or tertiary lesions of lues, and those in the latent period with a positive Wassermann reaction should be treated by a combination of salvarsan and mercury in two courses as described until the serum reaction is negative. Fordyce's opinion as to treatment in general is fully endorsed by us when he says: "It must ever be emphasized that the majority of patients with this infection are inefficiently treated and that their treatment is not sufficiently controlled serologically. As long as the reaction continues positive, the patient is in danger of relapse. The aim of all treatment is to bring about a clear negative Wassermann reaction which continues so for at least a year."

The rapidity of action of salvarsan makes its use imperative in the rapidly destructive lesions of syphilis, especially as they occur about the face and in the throat and mouth. These are frequently but slowly influenced by mercury and iodid treatment and much irreparable damage may be done within a short time. It is in these "emergencies of syphilis" that salvarsan works wonders. Its efficiency in malignant types of the disease, precocious syphilis, and in those cases resistant to mercury and iodid has been emphasized by all. It is true that in the much neglected Zittmann's decoction, when properly prepared, which is most difficult, we have the means to favorably influence many of these cases, but in certainty and rapidity of action on the lesions, in addition to its marked tonic effect in this class of cases, salvarsan remains unsurpassed. A case may be cited here to illustrate the effect of salvarsan in this type.

L. S., age 36, presented himself for treatment July 10, 1910. Infected 12½ years ago. Treated continuously with mercury in pill form and potassium iodid for the succeeding seven years, during six of which he had a succession of pustular and gummatous lesions of the scalp and face, which refused to heal. Treatment at Hot Springs, mercurial inunctions and pills, iodin in various forms for the next five years, all failed to arrest the disease. Three years ago a syphilitic elephantiasis of the upper lip developed, and recently ulcerating cutaneous gummata appeared on the lip and cheeks. He was much reduced in weight and strength and presented a cachectic appearance. The entire scalp was covered with scars or crusted cutaneous gummata, the ulcerative process extending down the back of the neck and in front of the ears to the jaw line on both sides. Under general tonic medication and local antiseptic measures he improved somewhat during the next six weeks and bichloride and iodid were given internally with some benefit. But progress then ceased and the patient was again losing ground whereupon it was decided to give an injection of salvarsan. Weight 108 pounds, Wassermann positive. Intramuscular injection 0.4 gm. salvarsan on November 10, 1910. After twelve days the lesions were almost healed, Wassermann *strongly* positive, weight 112 pounds. On December 11 the Wassermann reaction was negative, all lesions were healed, the elephantiasis of the lip had disappeared, and the patient

weighed 114 pounds. On January 11, 1911, Wassermann positive, weight 117½ pounds, apparently in the best of health. No recurrence to date (July 26, 1911) in spite of absence of all further treatment. Wassermann continues positive, patient remains without lesions and is apparently well.

Great interest centers upon the results of the treatment with salvarsan of specific affections of the nervous system, and fairly definite conclusions are permissible. In cerebral syphilis some remarkable results have been obtained. In the Erb type of spastic paralysis favorable results have followed quite uniformly. In the only case of this kind treated by us considerable improvement resulted within two weeks after an intravenous injection of 0.3 gm., and has since been maintained for more than four months.

The results in tabes have been variable, and for the greater part discouraging, cases showing marked improvement alternating with complete failures. It is self-evident that cases of tabes with advanced degenerative changes are beyond any possible medicinal help, and Ehrlich warns against the use of salvarsan under these conditions. It is possible, however, that when the indications for its use in syphilitic affections of the nervous system are finally determined, some cases will not be denied the benefit of treatment, which at present is refused them, owing possibly to an excess of conservatism. It is quite generally agreed that early cases of tabes, which have had little or no mercurial treatment for their antecedent lues, with a strongly positive Wassermann reaction, gastric or other crises and pains, and without ataxic symptoms, are susceptible of improvement under treatment, with a possibility of arrest of the disease. The dose of salvarsan in these cases should vary from 0.2 to 0.4 gm. according to Ehrlich's latest advice, and may be repeated.

No benefit is to be expected from the salvarsan treatment of those cases of old tabes which have been repeatedly and vigorously treated with mercury and iodid, and in whom the Wassermann reaction is either negative or slightly positive. But instances have been recorded in which marked benefit was obtained even in cases which appeared at first to offer no prospect of result. We have recently seen a return of both patellar reflexes, which had been absent for three years or more, and slight widening of the pupils which had been pinpoint and fixed, after two intravenous injections, each of 0.3 gm.

In paresis the remedy has been of decided value in some instances, and in a large proportion of these cases is of temporary benefit. In a case observed by us with Dr. H. V. Ogden the effect was astounding. Within two months after intramuscular injection of 0.4 gm., a cachectic, bedridden, partly demented paralytic was transformed into a well

nourished man who could attend to his business and walk about freely. But this remarkable remission of symptoms was only of temporary character, and the patient has recently been gradually reverting toward his former condition; he has had only the one injection.

It was feared at first, in spite of favorable reports from animal experimentation, that practical experience with salvarsan might show that it exerted a toxic effect upon the optic nerve, in common with its predecessors atoxyl and arsacetin. But in tens of thousands of cases treated by this time, and often without regard to any contraindications that might exist to its use, not one case of blindness directly attributable to salvarsan has been reported. Optic neuritis has been repeatedly observed following treatment with a single dose but these cases are all of the nature of neuritic inflammations of syphilitic origin and not toxic. In fact, salvarsan is directly indicated in these affections of the cranial nerves occurring during the first year of syphilis. But it is of no benefit and may be harmful in those cases of optic neuritis of the primary degenerative form.

In congenital syphilis in the newborn the cutaneous lesions usually disappear rapidly after treatment, but many of these infants succumb later. In older children bone and cutaneous lesions respond readily to the remedy, but many failures in the treatment of interstitial keratitis have been recorded.

Although salvarsan has been used in an enormous number of cases there is no recorded instance of a fatal result due directly to the remedy when used in uncomplicated lues. The fatalities which have resulted are shown by autopsy records to have occurred in cases with advanced degenerative changes in the nervous system, complicated with organic disease, in extreme cachexia, alcoholism, or other pathological condition, including advanced luetic changes in important organs. No evidence of arsenical intoxication was discoverable. The elimination from treatment of patients in whom such complicating conditions are ascertainable will render the treatment safe. The contraindications to its use have been formulated to include organic heart and blood vessel disease, nephritis which is not of syphilitic origin, retinal and optic affections not due to syphilis, advanced disease of the brain and cord, pulmonary disease that is not tuberculous, and fevers. Several observers have recently emphasized the need of caution in employing salvarsan when the leutic process occurs in the neighborhood of vital nervous centers, especially the medulla oblongata, as well as the spinal cord, because of the possibility of implicating these in the local reaction.

The effect of salvarsan on the Wassermann reaction is such as to materially shorten the time in which a negative reaction can be obtained; in some cases, as in the one cited above, the reaction becomes more strongly positive before its conversion to negative. Repetition of the dose, or subsequent treatment with mercury is however generally required to maintain the negative state of the reaction.

Those in a position to judge from actual experience with the remedy in large series of cases are unanimous in regarding salvarsan as a most important addition to our therapeutic resources, although time alone can determine the permanency of its curative action, used alone or conjointly with mercury.

---

## ABSTRACTS.

---

**On Ocular Affections in Plague.** WERNCKE, THE., Odessa, (Zeitschrift für Augenheilkunde, 25, Feb. 1911, p. 186), observed ocular affections in 3 out of 140 cases of plague, and reports the clinical histories. 5 eyes were affected, viz.: 4 with serous iritis and slight irritation of the ciliary body, one with serous iritis and hypopion and one with optic neuritis, from 2 to 4 days after the onset of the plague. All recovered. Hyperemia of the conjunctiva, which with sudden rise of temperature and painful swelling of the peripheral lymphatic glands is considered by Mizno as a characteristic symptom of the plague, was not observed in this epidemic. Therefore W. thinks that it cannot be regarded as a constant and pathognomonic sign of the disease. C. Z.

---

**Arsenobenzol in Syphilitic Eye Affections.** VON GROSZ, EMIL, Budapest, (Deutsche Medizinische Wochenschrift, 1910, No. 50, p. 2333), considered in his former communication on 14 cases, reviewed in the April No. of Ophthalmology, simple atrophy of the optic nerve, which occurs mostly as a consequence of tabes, as contraindication to 606. Now he waives this contraindication, if the remedy is otherwise indicated. In some out of 60 cases of syphilitic eye affections, on which he reports, he observed as accessory symptoms slight necrosis of the skin, and in 3 cases small corneal infiltrations, which healed eventually. Three cases required a second injection, by which cases of iritis, optic neuritis and ocular palsies were cured which developed after a relapse of lues. This proved these affections were simply relapses and could not be ascribed to arsenobenzol.

Von Grosz concludes: Arsenobenzol is uninjurious for the optic nerve. Aggravation of an existing eye disease through the remedy is not to be feared. Improvement of simple optic atrophy is not to be expected but this is not a contraindication to its application. A favorable result is most likely in luetic

iritis, chorioretinitis, directly luetic ocular palsies and eventually in suitable cases of parenchymatous keratitis. Nothing can be said on lasting cures, as this requires much time. C. Z.

---

**Prophylactic Measures for Patients Doomed to Blindness.** HELLER, S., Wien, (Zeitschrift für Augenheilkunde, 25, January, 1911, p. 67), sets forth, for his 37 years experience as teacher of the blind, the importance of sending patients, who are losing their sight, in the preliminary stage of blindness to the schools for the blind, lest the most valuable and effectual starting points for pedagogic measures are greatly reduced or entirely lost. By systematic and rational methods the involuntary tendency of persons, affected with progressive blindness, to control the defective visual perceptions by the sense of touch can be much better developed and scarcely definable psychic conditions can be produced, in which the problematic value of tactile perceptions are considerably and constantly increased by new acquisitions. The transmission of qualities specific for the visual perceptions to tactile perceptions causes that the persons, becoming blind later on, revive and retain the various visual remembrances and utilize them for combinations. The neglect or even the retardation of this important and effectual transmission obscures and confuses the pictures of remembrance and produces the sad aspect of petrification, resignation and apathy, equivalent as it were to a sound, psychical blindness. C. Z.

---

**To the Knowledge of Secondary Injuries of the Eye by Vaccine.** HILBERT, R., Sensburg. (Centralblatt für prakt. Augenheilkunde, 35, March, 1911, p. 65.) According to Groenouw, out of about 50 cases of vaccinula of the eye published, 8 were caused by autoinfection. S. reports a case of autoinfection in a girl, aged 12 years, in whom the vaccinula on the right eye occurred after the pustules at the left upper arm had almost healed. Both lids were intensely red and swollen, so that the eye could not be opened spontaneously. The swelling and redness extended over the cheek and temple, and the preauricular glands were enlarged and sensitive. The conjunctiva was bluish red and loosened, the cornea intact. At the temporal half of the upper lid were 3 round pustules, 2mm. in diameter, pitted in the center, another one was in the middle of the lower lid border. Differing from former observations, the infected places had not the aspect of diphtheric or croupous ulcers, but of typical vaccine pustules. The affection healed in a month under treatment with boric ointment, leaving white smooth scars, on which the cilia were lacking. The left eye showed conjunctival catarrh and blepharitis ciliaris. Most likely the infection was transmitted by the finger-nails, with which the child scratched the itching arm and eyelids, which were especially susceptible to infection by the blepharitis ciliaris. C. Z.

---

# WISCONSIN MEDICAL JOURNAL

OFFICIAL PUBLICATION OF THE STATE MEDICAL SOCIETY OF WISCONSIN.

A. W. MYERS, M. D., Editor.
141 Wisconsin Street, Milwaukee.

J. P. McMAHON, M. D., Managing Editor.
141 Wisconsin Street.



Publication Committee:

A. J. Patek, M. D., Milwaukee. G. E. Seaman, M. D., Milwaukee
O. H. Foerster, M. D., Milwaukee. C. S. Sheldon, M. D., Madison.
S. S. Hall, M. D., Ripon.

Collaborators:

The Council.

M. R. Wilkinson.....Oconomowoc
G. Windesheim.....Kenosha
F. T. Nye.....Beloit
W. Cunningham.....Platteville
J. V. Mears.....Fond du Lac
H. W. Abraham.....Appleton
Edward Evans.....La Crosse
T. J. Redelings.....Marinette
O. T. Hougen.....Grand Rapids
R. U. Cairns.....River Falls
J. M. Dodd.....Ashland
H. E. Dearholt.....Milwaukee



Annual Subscription. - - - $2.00. Single Copies, - - - - - $0.20

Address all business communications to
WISCONSIN MEDICAL JOURNAL,
504 Goldsmith Building, Milwaukee.

[Entered as second class matter, June 30th, 1903, at the Post Office at Milwaukee, Wis., under Act of Congress, March 3rd, 1879.]

Vol. X. SEPTEMBER, 1911. No. 4


## EDITORIAL COMMENT.

### THE DANGER FROM HUMAN RABIES.

Cases of rabies have been frequent enough in Wisconsin of late to bring up for consideration the question of the danger of infection of those who are coming in close contact with these patients. In order to get an opinion on this point an appeal was made to Dr. M. P. Ravenel, Director of the Wisconsin State Hygienic Laboratory, who replied that "It has been definitely proven that the saliva of a man suffering from rabies contains the virus just as the saliva of a dog. The same controversy raged over the question of herbivorous animals, but this has been definitely settled, not only experimentally, but also by the spread of the disease amongst herds of deer, etc. As an actual matter of fact, instances of infection from man to man are extremely rare. The chief reason for this I believe is that it is only during con-

vulsions that a man will bite an attendant, and it is then done unintentionally. Also man is not equipped with teeth which puncture readily and wounds are bruised rather than punctured. However, as said before, the danger does exist and man enjoys no immunity in this regard."

While actual bites are no doubt rare there are many times when the hands of the attendant come in contact with the saliva of the patient and if cracks or abrasions were present on the hands or fingers an opportunity for the entry of the virus would be afforded.

On this account the wearing of rubber gloves by those handling patients with rabies is to be advised and if there has been actual exposure to infection before the condition is recognized Pasteur treatment should be recommended.

## ESSENTIALS AND NON-ESSENTIALS IN DIAGNOSIS.

The interesting address which Dr. Richard C. Cabot of Boston delivered at the Waukesha meeting of the State Medical Society is published in this issue of the Journal and will be read with enjoyment by those who listened to him as well as by those who were not present.

Dr. Cabot's theme is one that is of vital importance to every practitioner of medicine. How shall we find out what is wrong with the patient before us without waste of time or waste of effort? That is the question which confronts each one of us every day of our lives. Dr. Cabot in his talk tried to make us see that an examination may be complete and searching and yet not unnecessarily time consuming. He was not pleading for superficial methods. His whole idea was that thoroughness is possible even for the busy man and is attainable by simple methods without expensive equipment.

The man who summarized his views of the meaning of Dr. Cabot's address as being "To h—— with the microscope", missed the point entirely. As well say that it meant "To h—— with the clinical thermometer", or "To h—— with the tongue depressor". Each is made to be used but not to be worshiped.

It is an encouragement to each of us to be reminded that thorough work may be done without elaborate instruments, but the thought also comes that the responsibility for doing thorough work thus rests entirely upon us. We cannot plead as an excuse for superficial methods that we are not equipped with expensive laboratory facilities. These are all right in their place, and no one values them more highly than Dr. Cabot, but a perusal of the Annual Address in Medicine ought to convince everyone that thorough, conscientious work can be done in the humblest surroundings and in the smallest communities.

## FEE-SPLITTING AND COMMISSIONS.

Under the title of "The Farce of Medical Ethics" an article appeared in the September number of Pearson's Magazine which handles the subject of fee-splitting without gloves and yet in a spirit of sincere friendliness to the medical profession. No doubt this article will be followed by many others in various publications and no doubt much that is unjust will be said about the medical profession, but for all that it is a wholesome thing that the search-light of publicity it to be turned upon this iniquitous practice. Those who are guilty of buying and selling their patients in this way deserve no mercy from the profession or from the public.

The title of the article referred to seems to us poorly chosen and the opinion of the author that "the tap-root to the evil is medical ethics", can hardly be justified. The Code of Medical Ethics calls for nothing but decent courtesy and fair dealing both with brother physicians and patients and the fact that hypocrites try to use it as a cloak for their unrighteousness does not alter the case.

It is not a question of "medical ethics". The root of the evil goes deeper than that. It goes right down to the foundations of character; it is a question of honesty, decency, fortitude, self-respect. The man who gives or receives a rebate or commission is tampering with these very foundation stones of character without which the superstructure of medical attainments is a flimsy thing indeed.

The insidious and demoralizing influence of fee-splitting, especially on the younger members of the profession, is well stated in a quotation from Colorado Medicine which is given in Pearson's: "With a poorly paying practice on the one hand and a rich bait of fifty per cent. of the fees dangling within easy reach on the other, they soon begin to strain a point and urge operations where operations are unnecessary." When the temptation has once been yielded to there is no longer the singleness of purpose to cure the patient as quickly, safely, and pleasantly as possible, and to achieve success and to win an honest reputation by doing this one thing well. Instead the Devil pauses "from going to and fro in the earth, and from walking up and down in it", makes a noise like a fat bank account, and whispers in the young physician's ear; "This looks like a promising case, what do you think you can make it pay you?" With that thought in the back of his brain a doctor may imagine that he is giving the patient his best services, but he cannot do it. It is a human impossibility. In spite of himself he will be influenced by unworthy motives.

No one can blame a doctor for wanting to make money but the sooner the realization comes that fee-splitting is not an honest way of

doing it the better it will be for all. The specialist who said: "It's nobody's business what I do with the fee, as long as I do not overcharge. If I want to give half of it away, that is my affair and it does not concern the patient or anybody else," showed a "callousness and numbness of soul," a moral stupidity, and a disloyalty to his chosen profession which ought to disqualify him from practicing medicine. The man who can say that ought to have been born a pig, he has all the characteristics.

As the writer in Pearson's says: fee-splitting "is done behind the patient's back, and, being discovered shatters that fine confidence in the man of medicine. Secretly carried on, it cheats all hands and puts the public at the mercy of unscrupulous men. It has grown up in darkness and has lent itself to all the corrupting influences that the shifty human mind has been capable of inventing."

Every surgeon or specialist who splits a fee and every general practitioner who profits by it is helping to tear down that confidence of the general public in the medical profession which is the monument to the faithful service of the generations of medical men who have gone before us.

But what are we to do about it? The writer in Pearson's Magazine believes that the sending of a joint bill by the physician and the surgeon would cure the evil. This would help to correct the present unfair disproportion between the surgeon's fee for the operation and the physician's usual compensation for his services in connection with the case. But would it prevent the evils of fee-splitting? Not in the least. The unscrupulous surgeon could still send his little check to the unscrupulous general practitioner, even if a joint bill had been sent in.

Bernard Shaw in his amusing tirade against the profession in the preface to "The Doctor's Dilemma" thinks that as long as the physicians have to be recruited from the ranks of mere human beings, cherubim and seraphim being unavailable, it is useless to expect any real improvement under the present order of things. His remedy would be to have all practice in the hands of Municipal Officers of Health who would be paid by the community and would therefore have no interest in urging operations or expensive forms of treatment. Like many other socialists he thinks you can change human nature by putting on a different label.

What will help to correct the evil must go deeper than that. We must help the physicians themselves to see the dishonesty and degradation of it. And in this direction the widest possible publicity and the most unsparing criticism by the public will help.

Next we must get the support of the public to help us purify the sources of medical education. Not all the rebaters are graduates of poor schools, there are many whose training has been excellent. But the student who graduates from an institution whose faculty are paid only indirectly, i. e., by the work they get from its graduates, is apt to be trained in a tainted atmosphere.

The public pays the bills. It is to the public's interest to see to it that the physicians unto whom suffering men and women must turn in their darkest hours are not only trained in the best that medicine and surgery have to offer but that they are kept free from demoralizing and debasing influences during this plastic period of their lives.

If we need reforming so badly let us do it ourselves instead of waiting for some outside agency to take us in hand.

Let the surgeons unite and say: We will not do this thing." Let the gynecologists and the ophthalmologists and the otologists and the rest do the same thing.

Let the societies speak out plainly and condemn this practice.

Above all let each individual physician have the fortitude to stand up resolutely and resist this subtle temptation however great the cost.

---

## NEWS ITEMS AND PERSONALS.

**Dr. Franz Pfister,** Milwaukee, Associate Professor of Rhinology and Laryngology in the Medical Department of Marquette University, has removed his office to the Majestic Building and in the future will limit his practice to diseases of the ear, nose and throat.

**The Chicago Tribune** has begun the publication of a department called "How to keep well," which will be edited by Dr. W. A. Evans, formerly health commissioner of the City of Chicago.

The new department conducted by Dr. Evans appears in the Tribune daily and Sunday. The department will appear on the editorial page during the week.

So far as is known this is a new undertaking in newspaper work and its results will be watched with interest. The daily newspaper is a powerful educational agent and under the wise guidance of Dr. Evans this department ought to become a power for good.

**Dr. C. C. Waufl,** Janesville, is seriously ill with typhoid fever.

**Dr. J. M. Dodd,** Ashland, will commence suit against Sawyer County to collect a fee of $1,000.00 for services rendered Myra Dietz last year.

Bruno Grosser, assistant secretary of the National Jewish Hospital for Consumptives at Denver, was arrested September 3rd, charged with embezzlement. Hospital authorities state the amount of the alleged thefts to be in neighborhood of $80,000. President Grabfelder has announced his intention of contributing $50,000 to make up the defalcation, and has asked others to make contributions.

**The State Board of Control,** on August 31st, purchased six acres of land at Waupun for a site for the criminal insane hospital. The price paid was $6,000.

**Deaths.** Dr. Wendell D. Neville, Eagle River, died suddenly at Chicago while en route to his old home at Ruthven, Ontario, on August 25th. Death was due to organic heart disease.

Dr. Neville graduated from the Michigan College of Medicine in 1884. He was a member of the Oneida-Forest-Vilas County Medical and State Medical Societies.

Dr. Isaac Buckridge, Beloit, died on August 30th. Death was due to enlargement of the liver and heart disease.

Dr. Buckridge was born in Rochester, N. Y., May 23, 1850. Nine years later he moved with his parents to Poplar Grove, Ill. By work of various kinds, he secured his own education, finally making his way through college by teaching school at intervals. He graduated from Beloit College in 1876, thereupon becoming principal of the Roscoe schools, a position he held for three years. He then took up his medical training, graduating from the Hahnemann Medical College in 1882. He came at once to Beloit and had practiced there ever since, until compelled to retire last winter, because of ill health. He was a member of Rock County and the State Medical Societies.

**Removals.** Dr. A. M. Foster, Kaukauna to Wrightstown.
Dr. J. F. Martell, Reedsburg to Oshkosh.
Dr. E. H. Ehlert, Hartford to La Crosse.
Dr. John Montgomery, Eau Claire to Superior.
Dr. J. T. Kings, Oconomowoc to Watertown.
Dr. C. M. Wray, Oshkosh to Waterloo, Iowa.
Dr. S. F. Andrew, Birchwood to Honey Creek.

**Dr. A. J. Berger,** Johnson Creek, has been appointed medical assistant at the State Tuberculosis Sanitarium at Wales.

**Dr. A. H. Sanford,** Professor of Physiology at Marquette University, Milwaukee, has resigned to take charge of the laboratory in the sanatorium of the Drs. Mayo, Rochester, Minn. He will probably be succeeded by Associate Professor F. N. Schnetz.

**Dr. Robert Kilto,** Racine, was painfully, though not seriously, injured in an automobile accident, September 1st.

# THE STATE MEDICAL SOCIETY OF WISCONSIN

ORGANIZED 1841

## Officers 1911-1912.

J. M. DODD, Ashland, President.

T. J. Redelings, Marinette, 1st Vice-President.

C. A. Armstrong, Boscobe, 2d Vice-President.

H. E. Dearholt, Milwaukee, 3rd Vice-President.

CHAS. S. SHELDON, Madison, Secretary.

S. S. HALL, Ripon, Treasurer.

ROCK SLEYSTER, Waupun, Assistant Secretary.

## Councilors.

TERM EXPIRES 1917.

1st Dist., M. R. Wilkinson, - Oconomowoc
2nd Dist., G. Windesheim, - - Kenosha

TERM EXPIRES 1912.

3rd Dist., F. T. Nye, - - - - Beloit
4th Dist., W. Cunningham, - - Platteville

TERM EXPIRES 1913.

5th Dist., J. V. Mears, - - Fond du Lac
6th Dist., H. W. Abraham, - - Appleton

TERM EXPIRES 1914.

7th Dist., Edward Evans, - - La Crosse
8th Dist., T. J. Redelings, - - Marinette

TERM EXPIRES 1915.

9th Dist., O. T. Hougen, - - Grand Rapids
10th Dist., R. U. Cairns, - - River Falls

TERM EXPIRES 1916.

11th Dist., J. M. Dodd, - - - Ashland
12th Dist., H. E. Dearholt, Milwaukee

## Delegates to American Medical Association.

L. F. Bennett, Beloit. C. S. Sheldon, Madison. A. H. Levings, Milwaukee

## Alternates.

F. S. Wiley, Fond du Lac. Wilson Cunningham, Platteville. R. G. Savle, Milwaukee

## Committee on Public Policy and Legislation.

A. W. Gray, Milwaukee, Chairman. J. P. McMahon, Milwaukee. F. F. Bowman, Madison.

## Committee on Medical Defense.

G. E. Seaman, Milwaukee, Chairman. S. S. Hall, Ripon. A. J. Patek, Milwaukee,

## Committee on Prevention of Tuberculosis.

C. A. Harper, Madison. G. E. Seaman, Milwaukee. M. P. Ravenel, Madison.
J. M. Beffel, Milwaukee. C. H. Stoddard, Milwaukee.

## Program Committee.

A. W. Gray, Milwaukee, Chairman.

## NEXT ANNUAL SESSION, WAUSAU, 1912.

The Wisconsin Medical Journal, Official Publication.

## LIST OF EXECUTIVE OFFICERS OF COUNTY MEDICAL SOCIETIES.

| County. | President. | Secretary. |
|---|---|---|
| Ashland-Bayfield-Iron | J. M. Meyers, Odanah | J. M. Dodd, Ashland. |
| Barron-Polk-Washburn-Sawyer-Burnett | H. B. Crommett, Amery | I. G. Babcock, Cumberland. |
| Brown-Kewaunee | R. C. Buchanan, Green Bay | T. J. Oliver, Green Bay. |
| Calumet | F. P. Knauf, Kiel | J. A. Schmidt, Brillion. |
| Chippewa | A. W. Wilmarth, Chippewa Falls | A. L. Beier, Chippewa Falls. |
| Clark | H. H. Christofferson, Colby | E. L. Bradbury, Neillsville. |
| Columbia | B. C. Meacher, Portage | A. J. Batty, Portage. |
| Crawford | A. E. Dillman, Steuben | A. J. McDowell, Soldiers Grove. |
| Dane | G. H. Keenan, Madison | T. W. Tormey, Madison. |
| Dodge | A. E. Bachhuber, Mayville | C. G. Schwalback, Juneau. |
| Door | | |
| Douglas | F. J. Johnson, Iron River | R. K. Lohmiller, Superior. |
| Dunn-Pepin | A. F. Helsing, Menomonie | B. J. Steves, Menomonie. |
| Eau Claire | H. A. Fulton, Eau Claire | E. L. Mason, Eau Claire. |

| County. | President. | Secretary. |
|---|---|---|
| Fond du Lac | G. T. McDougall, Fond du Lac | F. A. Read, Fond du Lac. |
| Grant | C. R. Pickering, Muscoda | M. B. Glasier, Bloomington. |
| Green | L. A. Moore, Monroe | G. S. Darby, Brodhead. |
| Green Lake-Waushara-Adams | G. E. Baldwin, Green Lake | R. H. Bucklaud, Green Lake. |
| Iowa | W. S. Lincolu, Dodgeville | W. M. Gratiot, Mineral Point. |
| Jefferson | James Cox, Jeffersou | C. R. Feld, Watertown. |
| Juneau | E. H. Townsend, New Lisbon | A. T. Gregory, Elroy. |
| Kenosha | W. M. Farr, Kenosha | J. H. Cleary, Kenosha. |
| La Crosse | C. H. Marquardt, La Crosse | M. W. Dvorak, La Crosse. |
| La Fayette | O. L. Hansen, Argyle | C. O. Latham, Darlington. |
| Langlade | M. J. Donohue, Antigo | J. C. Wright, Antigo. |
| Lincoln | C. C. Walsh, Merrill | Herbert Saylor, Merrill. |
| Manitowoc | J. R. Currens, Two Rivers | A. J. Shimek, Manitowoc. |
| Marathon | L. M. Willard, Wausau | Emile Roy, Wausau. |
| Marinette-Florence | H. F. Schroeder, Marinette | M. D. Bird, Marinette. |
| Milwaukee-Ozaukee | A. J. Patek, Milwaukee | Daniel Hopkinson, Milwaukee. |
| Monroe | C. H. Cremer, Cashton | A. R. Bell, Tomah. |
| Oconto | J. B. Atwood, Oconto | R. C. Faulds, Abrams. |
| Onelda-Forest-Vilas | J. M. Hogan, Oshkosh | C. A. Richards, Rhinelander. |
| Outagamie | V. F. Marshall, Appleton | J. P. Dohearty, Appletou. |
| Pierce | E. R. Halliday, Ellsworth | S. F. Rudolf, Ellsworth. |
| Portage | J. D. Lindores, Stevens Point | W. F. Cowan, Stevens Point. |
| Price-Taylor | C. E. Nystrum, Medford | G. H. McClure, Westboro. |
| Racine | E. A. Taylor, Racine | Susan Jones, Racine. |
| Richland | P. G. Lasche, Ithaca | A. D. Campbell, Richland Center. |
| Rock | G. W. Fifield, Janesville | E. B. Brown, Beloit. |
| Rusk | G. M. Carnahan, Bruce | W. F. O'Connor, Ladysmith. |
| Sauk | | Roger Cahoon, Baraboo. |
| Shawano | E. Puckner, Wittenberg | J. B. Gordon, Shawano. |
| Sheboygan | Edward Felter, Plymouth | W. F. Zierath, Sheboygan. |
| St. Croix | O. H. Epley, New Richmond | Boyd Williams, Hudson. |
| Trempealeau-Jackson-Buffalo | C. F. Peterson, Independence | H. A. Jegi, Galesville. |
| Vernon | John Schee, Westby | F. E. Morley, Viroqua. |
| Walworth | R. E. Rugh, Lake Geneva | M. V. Dewire, Sharon. |
| Washington | F. P. Leich, Jackson | S. J. Driessel, Barton. |
| Waukesha | J. H. Voge, Oconomowoc | R. E. Davies, Waukesha. |
| Waupaca | T. E. Loope, Iola | G. T. Dawley, New London. |
| Winnebago | B. C. Gudden, Oshkosh | W. L. Herner, Winnebago. |
| Wood | J. C. Hayward, Marshfield | J. B. Vedder, Marshfield. |

---

## SOCIETY PROCEEDINGS.

### CALUMET COUNTY MEDICAL SOCIETY.

The Calumet County Medical Society met at Chilton, September 1, 1911. In the absence of the President and Vice President, the Secretary appointed Dr. C. L. MacCollum as temporary chairman. Chairman called meeting to order, the following doctors being present: Drs. Bolton, N. J. Knauf, Greengo, Lawler, MacCollum, Fechter, McComb, and Schmidt. Minutes of previous meeting read and approved. The applications for membership of Drs. Fechter of St. Ann and Dr. Niemann of New Holstein read. The censors then made their report which was a favorable one. The Society voted favorably on both applications. Drs. Fechter and Niemann being declared duly elected to membership. We then listened to an interesting paper on *Adenoids and Tonsils, their effect upon the development of children*, by Dr. E. L. Bolton, Dr. Knauf discussed the treatment of same ad Libitum. A general discussion following.

There being no further business before the Society, it was moved and carried to adjourn, many of the members spending the balance of the day at the Calumet County Fair.

J. A. Schmidt, M. D., *Secretary.*

## GRANT COUNTY MEDICAL SOCIETY.

Tuesday, September 12th, was a memorable day in the history of Grant County Medical Society, as that was the date for the annual outing, at Cassville, Wisconsin.

Upon arriving at this picturesque village situated upon the banks of the Father of Waters, we were met by Dr. W. P. Hartford and Dr. J. J. DeMers, who escorted us down to the river bank, where boats were waiting to convey us to the Island, where dinner was to be served, and the program rendered.

A large barge, towed by two launches, was loaded with things necessary for the feast and our other entertainment, all of which had been prepared by Dr. Hartford, ably assisted by his estimable wife, and Dr. J. J. DeMers.

After a delightful ride of five miles upon the smooth surface of the river, we landed upon an Island, the beautiful scenery of which suggested that Nature had designed this spot for enjoyment of just such occasions as this.

The ladies having been included in this invitation, a goodly number accepted, and we thus had the inspiration of their presence. The tables were soon spread, and dinner announced, and about fifty responded to the call.

Words cannot do justice to this spread, one would needs *be* there and partake to fully appreciate its merits. But we noticed that turtle soup and friend catfish were the favorite dishes, while fried chicken and watermelon were close seconds, thus reminding one of those well known words of Owen Meredith:

"We may live without poetry, music, and art;
We may live without conscience; and live without heart;
We may live without friends; we may live without books;
But civilized man can not live without cooks."

After the "inner man" had been fully satisfied, we were treated to a "feast of reason and flow of soul."

Dr. Hartford acted as toastmaster, and fully sustained his reputation for originality and wit.

Responses were given to the following toasts: "Our Hosts," by Dr. Wilson Cunningham; "Influence of Children on the Home," Dr. J. E. Heraty; "Automobiles," Dr. J. M. Lewis; "Our Young Members," Dr. J. C. Doolittle; "The Country Doctor," Dr. W. B. Hartford; "Woman in Medicine," Dr. M. B. Glasier.

An interesting address on *Contract Practice*, by Dr. I. S. Biglow, of Dubuque, and an exhaustive report of a *Case of Carcinoma of the Pancreas, with Negative So-called Pancreatic Reaction; Cholecystenterostomy*, by Dr. J. C. Hancock, also of Dubuque, finished the scientific program.

Besides the Grant County members, we were pleased to have as our guests a number of members from the neighboring County Medical Society of Dubuque, Iowa.

After the close of the informal program, came the boat ride back to Cassville when the lengthening shadows upon the mirror-like surface of the beautiful Mississippi warned us of the approach of the twilight hour. Then to our homes, after good byes had been spoken, and our genial hosts had said to each and every one: "Come again next year."

M. B. Glasier, M. D., *Secretary.*

## GREEN LAKE-WAUSHARA-ADAMS COUNTY MEDICAL SOCIETY.

The Annual Picnic of the Green Lake-Waushara-Adams County Medical Society was held at Green Lake, Wis., August 15th. Thirty-one people enjoyed the day. The picnic was held at Sugar Loaf whither the party was taken by steamboat. Among the guests were Dr. S. S. Hall and daughter, and Dr. and Mrs. J. S. Foat and daughter of Ripon.

The weather was ideal, and the day was enjoyed by all.

R. H. Buckland, M. D., *Secretary.*

## LA CROSSE COUNTY MEDICAL SOCIETY.

The sixth regular meeting of the La Crosse County Medical Society was held at the La Crosse Club, September 7, the President Dr. Marquardt presiding. The minutes of the preceding meeting were read and approved. Dr. Dvorak then broached the subject of a Journal Club and spoke of the necessity for members doing some work along their respective lines for the society. It was generally agreed that we have not spent as much time as we might on papers, etc., and a plan was formulated by which certain members are to read some good Journal and at the meetings bring up the newer things for discussion. A suggestion was made for the establishment of a reading room for members of this society; this on discussion however seemed not feasible because of the monetary considerations.

The meeting was then adjourned.

M. W. Dvorak, M. D., *Secretary.*

## MARATHON COUNTY MEDICAL SOCIETY.

A regular meeting of the Marathon County Medical Society was held at Wausau September 1st. Dr. Thos. H. Hay, Stevens Point, presented a paper *Tuberculosis and the Medical Profession.* A supper preceded the meeting.

## SECOND DISTRICT MEDICAL SOCIETY.

Pursuant to a call by Dr. Edward Kinnie and secretary Dr. M. V. Dewire, the Second District Medical Society held its annual meeting at Lake Lawn Hotel, Delavan Lake, August 29th.

The meeting was called to order with forty members present. The minutes of the last meeting were read and approved as read. President Kinnie then appointed the following committees: On Nominations, Dr. D. M. Munroe of Kenosha, Dr. R. W. McCracken of Union Grove, and Dr. F. R. Hyslop of Whitewater. On Bills, Dr. H. J. Stalker of Kenosha and Dr. B. J. Bills of Genoa Junction.

The committee on nominations reported the following names as candidates for officers for the ensuing year: for President, Dr. Wm. M. Farr of Kenosha, for Secretary-treasurer Dr. C. P. Gephart of Kenosha. On motion, properly seconded and carried the secretary was instructed to cast the ballot of the entire society for Dr. Wm. M. Farr of Kenosha for president. The secretary reported forty votes for Dr. Farr and none against. The president declared Dr. Farr elected. On motion, properly seconded and carried, the secretary was instructed to cast the vote of the entire society for Dr. C. P. Gephart for secretary-treasurer for the ensuing year. The secretary reported forty votes for Dr. Gephart for secretary-treasurer and none against. Dr. Gephart was declared elected for the ensuing year.

There being no further business to come before the society on motion the society adjourned, subject to a call from the president and secretary.

Following the business session the members of the society and their guests from Rock, McHenry and Lake counties then listened to an address by Dr. B. C. Corbus, of Chicago, on *Salvarsan or Ehrlich's "606"*, detailing its uses as recommended by Dr. Ehrlich himself, under whom he spent several months as the representative of the American Medical Association. He detailed the manner of using it, cases selected, methods employed, and results obtained, after eighteen months of use. Dr. Corbus extols highly the so-called combined method of treatment with salvarsan and mercurial inunctions, giving from two to four treatments with the salvarsan and from one hundred fifty to three hundred daily inunctions of mercury. His results obtained by this method as shown by case histories and illustrative photographs of patients treated, are simply wonderful and he is able to report apparently permanent cures after from twelve to fifteen months of treatment and observation. The address was full of practical points as to diagnosis, methods of locating and staining the spirilla, method and manner of treatments and results to be expected from them. All present thoroughly appreciated the talk and showed their appreciation by giving the Doctor a rising vote of thanks for his address and personally thanking him for it afterwards.

Following the address the members of the society and their wives, and their guests and their wives sat down to a sumptuous banquet prepared by the Lake Lawn Hotel people. Hatch's orchestra furnished some excellent music during the meal which added very much to the enjoyment of the occasion.

Following the dinner a program of toasts were given. Dr. Edward Kinnie acting as toastmaster. Dr. F. A. Rice of Delavan, on behalf of the Walworth County Society, in a few well chosen words, welcomed the district society to the beautiful Delavan Lake Resort, Dr. G. Windesheim of Kenosha, councilor for the Second District, "who is always chock full" on organization matters toasted the "Medical Society". Dr. J. G. Meacham, Sr., of Racine, gave a nice little talk on "The Social Side of the Profession", touching on the necessity of the Doctor's being able always to do his part socially in his community, and being able to relax occasionally from business and professional cares to take up those that touch and influence the whole community.

Dr. Wm. C. Broughton of Waukegan gave us a talk on "The Doctors Vacation", reminding us of the necessity of getting away from work and care for a change and a rest, that we might be the better able to take hold of and push the work on our return. Incidentally he spoke of the enjoyment he was getting out of the present meeting and expressed his opinion that the Second District M. D.'s were "a pretty good lot", to which all agreed of course.

Dr. Higgins of Milwaukee wound up the program with a toast to "The Silent Partner" paying a tribute to the loyalty and helpfullness of the doctor's wife. The toast was very appropriate and was well received by the many ladies present.

Following the meeting a trip was made around the lake on one of the steamers. The day was ideal, the program interesting, the banquet excellent, the toasts were fine and the enthusiasm contagious and all present voted the meeting of the Second District Medical Society a pronounced success in every way.

M. V. DEWIRE, M. D., *Secretary.*

NOTE—In addition to the above report, the secretary should have thanked the management of the Lake Lawn Hotel, Delavan, for having supplied a unique clinical case which presented such a complexity of symptoms that it taxed the diagnostic abilities of Doctors Nott, Taylor, McMahon, Fazen, Windesheim and Meachem to decipher them. Mng. Ed.

## THE ASSOCIATION OF
## COUNTY SECRETARIES AND STATE OFFICERS
### OF THE STATE MEDICAL SOCIETY OF WISCONSIN.

W. F. ZIERATH, M. D., Sheboygan
President.

M. V. DEWIRE, M. D., Sharon
Vice-President.

ROCK SLEYSTER, M. D., Waupun, Secretary.

NEXT ANNUAL SESSION, WAUSAU, 1912.

**Under this heading will be published each month, papers, editorials, sermons, reports of meetings and all that relates to the County Medical Societies of the state. To it all are invited and asked to contribute, especially the County Secretary. It is yours—make good use of it, and may it be of help to every County Society. It will be edited by Rock Sleyster of Waupun, secretary of the new association, to whom all communications for this department, reports of meetings and news matter should be addressed.**

# ANNUAL ADDRESS OF THE PRESIDENT OF THE ASSOCIATION OF COUNTY SECRETARIES AND STATE OFFICERS.*

BY T. J. REDELINGS, M. D.,

MARINETTE.

In contemplating the remarks which I am about to make, I wish first to thank you for the honor you have conferred upon me in electing me your first president, an honor which I shall cherish so long as memory serves me—the more dearly because to my own mind, no reason suggested itself to justify your choice.

I recognize in the personnel which constitutes this society and which shall constitute it in the future, the salt of the medical profession of this state, the leaven as it were, which shall enliven and in a measure lead the medical profession of this state. The slogan, "get together," under which the early promoters of reorganization operated and which was inscribed upon their banner, should still be waving in the air. Under this slogan we have made beautiful progress, although not all that was hoped for has been accomplished.

*Read at the 2d Annual Meeting of the Association of County Secretaries and State officers, Waukesha, June 6, 1911.

A study of the reports of the bodies operating under the American Medical Association, namely, the Council on Medical Education and the Council on Health and Public Instruction, is most gratifying. All serious-minded men, who have the welfare of humanity at heart, are mindful of the fact that medical education in this country has not been and is not now in a very satisfactory condition. Only six years ago there were one hundred and sixty-six medical schools in this country; now altogether there are one hundred and twenty-nine. Only about one-half of these schools are doing reasonably acceptable work. The other half of our medical schools, for lack of financial support, equipment and qualified instructors, are in such a condition that it would be fortunate for American medical education and for the American people if they were discontinued. Happily, we note a reduction in medical schools. The proprietary school should rapidly pass. There is today no justification for a medical school as a financial investment. The large numbers of inferior schools have been pouring their products into this country until the profession is teeming with men inadequately prepared, men in whom the spirit of altruism and the love of science is a negligible quantity, men who seem to have been moved to seek our profession from purely commercial motives and who speak of having landed victims and worked their cases to a finish, without the blush of shame or the remotest sign of being conscious of being guilty of an ethical break with their fellow-men. Another type of men is coming to us in liberal numbers, in whom viciousness is not apparent, but men who have not drunk deeply enough at the fountain head of medical knowledge to have lost even its mysteriousness, men inadequately prepared, but who by earnest endeavor, natural shrewdness, tact, and ability to learn quickly from others and from their own mistakes, are succeeding in a marvelous manner. The better medical schools are sending us largely an entirely different product, men whom it is a joy to behold and a privilege to meet, men endowed with loyalty, loyalty with all the attributes which enrich it, firmness, honesty, promptness, sympathy, a broad spirit of altruism and love of humanity, men who are upholding the honor of our great and noble profession, men who enrich the community in which they live. It is this conglomerate mass which the county secretary and councilor are trying to garner into one fold—the County Society. The difficulty, ingenuity, tact, patience, and perseverance which are necessary to accomplish this feat, all of you know. Other numbers on the program will deal with this subject specifically.

There are still other duties which may justly fall to county secretaries. We must contemplate the medical profession of the future.

The youth, at the close of his High School career, may have only a very indefinite and vague conception of the responsibility which he must assume when he decides upon medicine as a profession. Perhaps he is primarily moved by what seems to him to be the course of least resistance in gaining a livelihood. A humorist tells us that a young man when asked why he was choosing medicine for his life's work, answered "Well, you know doctors are the only people who continue to draw pay without producing results."

The County Secretary, who has informed himself upon the work of reorganization and reconstruction in medical education, will do well to court the friendship and favor of young men in his community who have announced themselves as candidates for medicine. He may very properly give them correct information concerning the better schools and hold up before them high ideals in medical attainment. Too often chance or opportunity govern the choice of school which the aspirant selects. Only after valuable time has been lost, does he awaken to the realization that an error has been made.

The doctor may rightly be regarded as a social servant. His skill and fidelity are community assets. The community and commonwealth may therefore assume a directing supervision in his preparation and in determining his fitness.

The State University becomes the logical sponsor. George Edwin MacLean, President of the State University of Iowa, in his address before the Council on Medical Education, said, "One purpose that a state should have in maintaining a school, is to set a standard, free from commercial motives. The wealth of the State will enable it perpetually to afford the best, and in the long run, the people will not be content with anything but the best from the State. As weights and measures are tested by standards kept by the State so should all voluntary educational enterprises be measured by the standards of State institutions. This must be pre-eminently true of something so vital to society as all institutions having to do with public health matters. A College of Medicine first should turn out well prepared practitioners, not simply to cure diseases but educated as sanitarians, conscious that the medicine of today must lend itself to the science of preservation of health and prevention of disease. The practitioner must be more than a mere medical man. He must be a citizen, and with large functions for society."

Wisconsin may well be proud of her University. It is an idol in the State and the pride and model of our nation. Its medical department was tardy in its development but when it came, it was organized along right lines. The faculty is composed of serious-minded

men, masters in their chosen fields and worthy preceptors for the young aspirant in medicine to follow. The laboratories are adequately equipped with apparatus and its financial support is sufficient for present needs. We may well be proud of our half school. Its product is eagerly sought and favorably received by the best medical schools of our country. It is already offering material aid to the physicians of the State in the diagnosis of specific diseases. It is lending its laboratory facilities to the profession. A movement is under way to establish a chair of psychiatry whose head shall act as consultant to the staff in our corrective and penal institutions. I hope the day is not very distant when the University will send its medical men to the various counties of the State to demonstrate to medical societies new and better methods, as it now sends its representatives from the agricultural department to the remote parts of the State to disseminate new and approved methods in agriculture, horticulture and animal husbandry. The part which the State University may play in the reorganization and uplifting of the weaker element of the medical profession, we have hardly begun to realize: "the corrective for a little education is more education."

Gentlemen, your labors have not been unrewarded, everywhere the professional spirit has been growing. In many instances the competitor has become a colleague. Our County Societies are growing in numerical strength, in the spirit of good fellowship and in the quality of the scientific work which is presented at their meetings. The man seen only at a distance and spied as an enemy, upon closer inspection and personal acquaintance, may become a genial friend.

Nine years have elapsed since this reorganization movement was begun. Today our confidence is strong that the problem before us is on the way to solution. The forces that make for confusion and destruction are still here, but the forces that make for construction are also here and are in fact winning the victory.

---

## BOOK REVIEWS.

**Public Hygiene,** by THOMAS S. BLAIR, M. D., author of "A Practitioner's Hand-Book of Materia Medica", "A Practitioner's Hand-Book of Modern Medical Treatment," etc., assisted by numerous contributors. In two volumes, with 158 illustrations, 8vo., cloth; price $10.00. Boston. Richard G. Badger, Publisher, 1911.

Whatever else may be one's opinion of Dr. Blair's new work on public hygiene, the evident enthusiasm and sincerity of the author surely must be commended. Although compiled largely by a man who professes to be only a general practitioner, the author shows that he has devoted an unusual amount

of time and interest to the increasingly important subject of public hygiene. If we do not feel quite in sympathy with the arrangement and handling of some of the subject matter we must bear in mind that the author wished to present a work which would address itself at once to the professional sanitarian, the general practitioner and the public at large—certainly an eminently difficult task. This plan of necessity ofttimes had to content itself with the presentation of the general thought and idea of a problem, without going more into the technical details which the professional sanitarian would look for. Yet, withal, it remains a very valuable work of reference to the sanitarian, who will find in it, aside from many valuable thoughts and suggestions, a large number of specimen report charts and quotations of state laws which will prove convenient and helpful. The large number of fine half-tone illustrations also make this work a very interesting one.

The work, however, is hardly a text book for the medical student. We cannot approve of a book which, for the twenty-five chapters that fill up its 700 pages, has a different author for almost each one of these chapters. Such a practice, although common enough in our modern systems of medicine and surgery, too often causes a loss in uniformity and compactness of text, making reading frequently difficult and wearisome by needless repetitions. While such a practice may be defensible in larger works of reference and encyclopedias, it certainly becomes extremely hazardous in smaller books, and from a literary point of view, surely it is an abomination. Yet, barring some of these after all minor points of nicety in literary composition, we are glad to say that we have read the work of Dr. Blair with a great deal of interest, and have thoroughly enjoyed many of its chapters.

Altogether, we heartily recommend this new work in public hygiene, and wish it all the success which this very important subject surely deserves.

G. C. R.

---

**The Optical Instruments.** VON ROHR, MORITZ, Scientific Assistant of the Optical Manufacturing Co. of Carl Zeiss, Jena. 2nd, improved and enlarged, edition. 140 pp. with 88 figures in the text. B. G. Teubner, Leipzig. 1911. Cloth, M. 125, $0.35.

This little volume which belongs to Teubner's collection "From Nature and Intellectual World," gives an excellent exposition of the modern views on the optical instruments for a larger circle of readers. After an introduction on the elementary laws of geometrical optics, viz.: the relations of position and magnitude of object and image of lenses and lens systems, the limitation of rays by diaphragms, the relation and absolute intensity of light by optical instruments, refraction, spheric and chromatic aberrations, the eye as the most important optical instrument and its use in seeing is the topic of the next chapter. It is dealt with under the following subdivisions: The eye as stationary optical system, accommodation; then the eye in direct vision i. e. with reference to its constant motion around its center, which lies 13 mm. behind the vertex of the cornea and serves as perspective center, and vision with 2 eyes.

The optical instruments are described in detail under 2 sections: those for objective use, as the photographic objectives, the camera obscura as drawing apparatus, the projection systems, and the instruments for subjective use: spectacles, magnifying glasses, loupes, verant, adapted for direct vision microscopes, ultramicroscope, and telescopes. Mathematical applications are

confined to a minimum absolutely necessary for better understanding. The discourse is very clear, the illustration very good. As many important points are treated here which are not found in the text books on physics, the book is of especial value for anyone who seeks reliable information on the essentials of optical instruments, and is most highly recommended.

C. ZIMMERMANN.

---

**Handbook of Physiological Optics.** VON HELMHOLTZ, H., Third Edition, supplemented and edited by Prof. W. Nagel, Rostock, in conjunction with Prof. A. Gullstrand, Upsala, and Prof. J. von Kries, Freiburg. Vol. III. The Doctrine of the Visual Perceptions. Edited by Prof. J. von Kries. 564 pp. with 81 illustrations in the text and 6 plates. Hamburg and Leipzig. Leopold Voss, 1910. 24 M. $6.00; Leather, $6.65.

In our review of the first volume of this famous work, in The Wisconsin Medical Journal, March, 1911, p. 630, the general plan and the principles were set forth, according to which the new edition was prepared. The third volume contains the doctrine of the visual perceptions and has been edited by J. von Kries, who by his numerous original investigations in this particular line was especially qualified to accomplish the difficult task most admirably. Also here the text of the first edition by von Helmholz is reproduced, with indications to the original paging, and each of the following chapters supplemented by additions by von Kries: On the ocular movements, the monocular field of vision, the direction of seeing, perception of different depths, binocular diplopia, conflict of the visual fields. This is followed by a very elaborate essay by von Kries on the arrangement in space of things seen, especially their independence on congenital formations and experience, subdivided in general remarks on the nature of the conception of space, on the normal relations of localization, on changes of localization in anomalous positions of the eyes, on learning and losing the faculty of seeing, on the physiological substrates of judging and learning, on the origin of the laws of ocular movements.

Of special interest is the chapter on empirism and nativism, in which the editor propounds what in this field can be asserted with fair certainty and what, according to the present state of our knowledge, is not accessible to a definite judgment. The accurate meaning of the expression "nativism" is more clearly defined and the laws governing the whole of these phenomena are termed morphological. The problem is thus designated: To unravel on the one hand the significance of the principles fixed by morphological laws, on the other, of processes subserving the general laws of exercise, and to gain insight into the manner of their co-operation and complementation. Von Kries considers his views, in their character, as empiristic in spite of what he recognizes as probable with regard to morphological bases. He especially emphasizes that von Helmholtz's empirism, although demanding some modifications and commendations, has given the leading thought which even today forms the essential part of our conceptions of these problems and the foundation for further researches.

A new chapter on the theory of binocular instruments concludes the work, in which von Kries completes the physical views arrived at by others by an excellent presentation of the physiological relations.

The handsomely gotten up volume is adorned by a portrait of von Helmholtz.

C. ZIMMERMANN.

# THE WISCONSIN MEDICAL JOURNAL

OCTOBER, 1911.

## ORIGINAL ARTICLES.

### OUR PRESENT UNDERSTANDING OF THE RHEUMATOID DISEASES.*

BY JOEL E. GOLDTHWAIT, M. D.,

BOSTON.

*Mr. president, ladies and gentlemen, members of the State Medical Society of Wisconsin:* In acknowledging my appreciation of the compliment which you have paid me in asking me to address you, it is my desire to express the hope that in that which is presented your interest may be stimulated not simply in rheumatoid diseases, but that your attitude toward chronic disease in general may come to be one of hopeful solution, instead of the hopeless or indifferent feeling so commonly held. The reproach which chronic medicine represents to our profession will never be removed until some such change in the general attitude of the profession is made. The greatness of our failure and the justification for this feeling of reproach, is probably hardly appreciated by the general practitioner busy with more acute needs, but to one whose work has almost entirely to do with such matters and is spent constantly seeing cases which represent the general failure of the profession, only a great faith in the profession and a deep belief that there must be a way out in all these conditions, could make the continuance of the work possible.

The particular part of chronic disease which is taken for discussion today, the Rheumatoid Diseases, is taken simply because it is with these diseases that I am most familiar. Much of that which is stated, however, has much broader application than simply rheumatoid disease, for it is my belief that the same principles which underlie the

*Annual Address in Surgery delivered at the 65th Annual Meeting of the State Medical Society of Wisconsin, Waukesha, June 8, 1911.

treatment and understanding of these diseases underlie the treatment and understanding of many of the other chronic conditions which at the present time are so unsatisfactorily treated in all the special lines. It is probable that many chronic diseases have the same fundamental cause, the manifestation in the special tissue being a matter of accident or idiosyncrasy.

In any consideration of rheumatoid diseases it should first be remembered that whatever nomenclature is used, that rheumatic or rheumatoid disease does not represent an entity, but that under this general head are several distinct diseases, each with different pathology and symptomatology, the exact understanding of which is necessary if the appropriate treatment is to be given.

### ATROPHIC ARTHRITIS.

In the first place there is the type of disease coming on usually in early adult life, more commonly in women than in men, insidious in its onset, gradually progressing, attacking usually the finger joints first with gradual extension to the others, associated with comparatively little pain, but leading to great crippling. This type of disease from the very beginning is associated with atrophy which shows in the cartilage, bone, and all the joint structures, and which shows later on in the superficial structures, in the skin, and periarticular tissues. The degree of atrophy at times is so great and the bone destruction so marked that the entire joint is destroyed and the bones ultimately fuse, much the same as occurs in severe forms of tuberculosis. In this type of disease atrophy is the essential characteristic, and for this reason the type of disease has been designated "atrophic arthritis."

### HYPERTROPHIC ARTHRITIS.

Another type of disease is one in which the exact reverse of this condition is present, in which there is thickening and hypertrophy of the cartilage, increase in the density of the bony tissue, formation of nodes about the joints, involving at times a single joint, as in Morbus Coxæ Senilis, at other times many joints, as in the Heberden's nodes on the fingers. The soft parts show comparatively little change. In this type of disease the characteristic type of pathology is so constant that the term "hypertrophic arthritis" has been used for its designation.

## INFECTIOUS OR TOXAEMIC ARTHRITIS.

Still another type of disease, and more common than either of the others, is one in which the local change in the affected joint is inflammatory in character, the disease being usually polyarticular,—occasionally monarticular,—at times being very severe, leading to great crippling,—at other times mild in character, ultimately disappearing with very little permanently to show for its presence. The local manifestation in this type of disease is always one of inflammation, the process being due to bacterial life present in the system, the local disturbances being due either to the direct presence of the bacteria at the seat of the disease, or else the result of toxines manufactured by bacteria elsewhere in the body. This type of disease, because of the aetiology, has been designated "infectious" or "toxaemic arthritis."

## STATIC JOINT LESIONS.

Still another type of disease, and a type which is very common, is that in which no true inflammatory condition is present and in which no general disease exists, but in which the symptoms are due entirely to mechanical maladjustment of the parts. It has long been known that if the arch of the foot is sprung that the ligaments are strained and that this strain may be so severe as to cause pain and swelling. The condition of flat or sprung feet is so well understood at the present time that such cases are not now often treated as rheumatism, but not only do such principles apply to the feet, but the knees may be strained, showing by sensitiveness, relaxation, at times swelling, with crepitation, the so-called "dry joint," and leading at times to much disability. Not only may the strain and weakness show here, but the sacro-iliac joints, which depend for their support almost entirely upon the muscles and ligaments, are frequently so much strained or used so wrongly that pain and weakness result, with at times great disability. The common sacral or low lumbar back-ache, which is seen in both men and women, which is present so commonly after long sitting or the maintenance of any one posture for long periods, which is frequently present at night, which is increased by stooping or the use of the body in the flexed position, commonly means strain or weakness of these joints. The common back-ache seen so much in those who use the automobile is usually due distinctly to this, and the so-called "automobile back" is nine times out of ten nothing more than the strain of these joints produced by bad postures assumed by those using such machines.

Not only this, but the shoulder joint at times is painful and sensitive, due not to the presence of inflammation in the joint, but simply to the forward position or drooped posture, in which the bursae about the joint are irritated as the result of the abnormal pressure and strain put upon them. Many of the cases of subdeltoid bursitis and subcoracoid bursitis, the cases which are commonly designated as periarthritis of the shoulder, are due simply to these malpositions, with the resulting strain, and represent primarily mechanical disturbances.

### GOUTY ARTHRITIS.

Still another type of disease, and fortunately a type which is not very common in this country, is that which shows by the deposit of masses of urate of soda in different parts of the body, particularly about the joints, associated with changes in the bone with local destruction most commonly involving the shaft of the bone, at times leading to the absorption of the greater portion of the shaft. In this type of disease the deposits are almost wholly the urate of soda, and the type of disease, for want of a better understanding, is designated as "gouty arthritis."

Thus we have five diseases of distinctly different character and naturally requiring different treatment, and to understand such conditions the first requisite is a thorough examination such as would be given any doubtful acute case. That such examination is not often given to the chronic patient will probably not be disputed, but if regularly made the seemingly difficult cases or the uninteresting cases oftentimes become comparatively simple and full of interest.

### TREATMENT.

In the matter of treatment of these conditions there is much for the profession to unlearn, and my chief plea is that nothing will be advised which does not appeal to the common sense when the pathology underlying the case is understood. If, for instance, the type of disease is the atrophic form, in which there is a progressive atrophy going on in the joints, bones, and other tissues, the common sense should suggest that depleting measures are not indicated. Consequently such a patient should not be starved, should not be sent to the baths for long courses of depleting bathing, should not be given drugs which destroy the digestion, but should, on the other hand, be fed up, be stimulated by baths, by massage, by fresh air, and the whole plan of treatment so carried out that the general tone of the patient is im-

proved rather than lowered. Of drugs, no one drug is of particular importance so far as we now know. Tonics and nutritive preparations are on the whole most desirable. At times, if there is much pain or discomfort, the salicylates have a distinct advantage, but if they are to be used it should be remembered that a small dose, five grains three or four times a day, will accomplish all that can be accomplished by this, and that it should not be used for long intervals because of the effect upon the digestion.

If contractures or deformities have resulted from the disease naturally these should be overcome, but radical or operative measures should not be undertaken until the local disease has become quiescent. With good hygiene, good care, and such general lines of treatment, this type of disease can usually be arrested so that the extreme degrees of crippling which commonly follow it can be prevented.

With the hypertrophic type of arthritis, a type of disease which seems to be due to some chemical disturbance in the body, careful regulation of the diet, with the local protection of the part, form the most desirable general measures. It is in these cases that oftentimes the depleting baths and the carefully restricted diets do most good in preventing the progression of the disease. It is always desirable in such cases to be sure that all the waste of the body is eliminated, and cathartics or the laxative foods and drugs are of distinct desirability. If much thickening has occurred about the joint and if there is pain, protection of the joint is to be desired. Pain is usually due to irritation resulting from the thickened nodes, and limitation of the motion so that this irritation is eliminated is usually associated by relief of the pain. Drugs in this type of disease are of very little avail except as has been indicated for digestive purposes. With general care this type of disease can usually be arrested, and in case much joint disability has resulted from the development of nodes within the joint the removal of these nodes is frequently followed by great relief.

In the treatment of the infectious or toxaemic type of arthritis naturally the first thing to do is to find the source from which the infection has resulted, recognizing the fact that the local joint lesion usually represents simply a result of something which is present elsewhere in the body. The areas from which the infection is most commonly absorbed are the throat, with the accessory passages about the throat and nose, the genito-urinary tract, and the gastro-intestinal tract. All of these areas should be examined with care with the idea of eliminating one or the other and locating in so far as is possible the primary difficulty. The treatment once the primary difficulty is

found should naturally be directed chiefly to that. The treatment of the local manifestation should be only such as would tend to relieve pain or prevent contractures or lessen the disability of the part. In the throat and nose it should be remembered that disease of the antrum, disease of the frontal sinus, disease of the tonsils, disease of the teeth, may at times lead to absorption which causes most serious forms of joint disease, leading to great crippling. The correction of some such local focus oftentimes is followed by rapid and complete relief. The same also is true of the genito-urinary tract, and while this should be examined most carefully it should be remembered at the same time that this is a much less common source of infection than is usually supposed.

Of the gastro-intestinal disturbances, with the recently acquired knowledge in regard to the malpositions of the viscera, the reasons for many of the disturbances in that portion of the body are easily understood. With the X-ray it is possible to determine whether the congenital forms of visceral ptosis exist, and if so where the probable source of the difficulty lies. Also the acquired forms of ptosis can be demonstrated and the special point of obstruction or difficulty recognized and relieved by means of exercises, posture, apparatus, and at times by operation. It should be remembered that any such case in which there is distinct involvement of the joint means most careful study of the body to find the source of the difficulty, recognizing the fact that unless such primary source is found and removed that the ultimate condition of the patient must become progressively worse, frequently becoming distressingly hopeless.

With the static forms of joint disease naturally the correction of the statics is the thing to be desired. With the flat foot, plates or proper shoeing is usually sufficient. With the knees, the correction of the other parts, so that their proper use is possible, will be sufficient. With the sacro-iliac joints, proper training in poise and general use of the body with properly fitted apparatus is frequently all that is required, the same thing being true of the shoulder conditions. Drugs in these cases have no place except in the form of tonics or such remedies as would tend to more rapidly improve the general tone.

The gouty condition naturally requires diet and general care which will tend to eliminate more perfectly the elements which are being stored up in the body, supplying at the same time by means of the diet the least amount of these undersirable elements that is possible.

Such is the general understanding of this class of disease. They are not difficult to understand; the pathology is not obscure once

they are carefully studied, and the treatment if planned in keeping with the understanding of the pathology becomes comparatively easy and reasonably exact. Similar principles probably hold in many of the other chronic diseases, and it is not improbable that arteriosclerosis and the hardening of the lens in the eye are similar in every way, except the tissue involved, to the condition found in the joints in the hypertrophic arthritis. It is not improbable that many of the skin conditions as well as many of the progressive spinal cord lesions are not unlike, except in the tissue involved, the diseases seen in the joints due to the infectious or toxaemic disturbances. It is not to be wondered at that many of the functional weaknesses exist when the marked static defects are present so that imperfect function as a whole must result. It should be borne in mind in the study of such conditions that no one part can be considered without considering its proper correlation to the other parts, and that if this proper correlation is understood and obtained that health many times will result and result speedily in conditions which previously have been considered hopeless.

In closing I have simply to make a final appeal to you that you will give the chronic patient the same care and the same thoroughness of study that would be expected of you and that you would commonly give to the acute case. By so doing you will not only add satisfaction to your own work, but will by aiding your patient relieve much of that which now represents a most unpleasant reproach to the profession in which you and I are interested.

---

# THE ACTION OF ARSENIC ON THE SKIN.*

BY ROBERT G. WASHBURN, M. D.,

ASSOCIATE PROFESSOR OF DERMATOLOGY, MARQUETTE UNIVERSITY, MEDICAL DEPARTMENT.

MILWAUKEE.

Arsenic is a drug which has long enjoyed a reputation for having a specific curative action in diseases of the skin. Its use in this connection was first advocated by Thomas Hunt in England and it is to his teaching that the very extensive use of the drug is largely due. So firmly fixed is the idea that arsenic is a dermatologic cure-all in the mind of the general practitioner—and especially is this true in

*Read at the 65th Annual Meeting of the State Medical Society of Wisconsin, Waukesha, June 8, 1911.

England—that the drug is given almost indiscriminately wherever the physician has to deal with a skin disease, no matter what the nature of that disease may be. That this reputation is, to a great extent, undeserved I believe anyone who has had any extensive experience with the use of arsenic must admit. It is on account of this very general abuse of arsenic that I wish to call attention to some of the indications for its employment and to the by-effects which may be met with in connection with its use.

Arsenic has been used in medicine since before the beginning of the Christian Era, in the form of some of its less active salts. The sulphids, realgar ($As_2 S_2$) and orpiment ($As_2 S_2$) were known to the Hippocratic school as early as 500 B. C. It was brought into prominence later, however, during the middle ages, through its use in the form of the more dangerous oxides in criminal poisoning. The activity of the notorious aqua tophana of the 16th Century was due to the presence of arsenic.

Arsenic is almost universally distributed in nature. It is an ingredient of the soil in the form of pyrites and may be taken up by vegetables grown on such land and thus gain access to the human body through food. It is found in mines in close association with many other metals, particularly with iron, cobalt and nickel. As a result of this fact, cases of poisoning with arsenic have been known to occur among men employed in mining these ores. Arsenic is found in association with iodine in many forms of algae, such for instance as Iceland moss. The tissues of man and animals normally contain the element in small quantities. On account of this very wide distribution, its detection is a matter of no small difficulty because of the great chance of contamination in the reagents and apparatus used in making the tests.

Poisoning with arsenic may occur in a variety of ways. There are on record a number of so-called epidemics of arsenical poisoning in which large numbers of individuals suffered from various toxic manifestations, due to the action of the drug in small doses over a prolonged period. Our present knowledge of the action of the drug is largely due to the thorough study which has been made of these cases.

Several of these epidemics have been very extensive, notably the beer epidemic in England, which has been so thoroughly studied by Brooke and Roberts. The contaminated beer was found to contain 1/100 gr. of arsenic in the half pint. Thus three glasses of the beer contained the average medicinal dose.

A similar group of cases occurred at St. Denis from contamination of the bread, another at Hyeres from the presence of arsenic in

the wine. Smaller groups of cases have been traced to garments, furniture, wall paper and tapestries. In these latter instances, the arsenic has been present in the dye used in the coloring of these articles. There is no unanimity of opinion as to the means by which the arsenic gains access to the body from dyes. One group of observers believes that the drug is given off in a fine dust and is inhaled; others, on the contrary, contend that arsenuretted hydrogen is formed through the action of respired air on the arsenical dye and that this gas is inhaled and causes the symptoms of poisoning. Accidental poisoning with arsenic may also occur among workmen exposed to the metal, either in mines or in the course of the manufacture of articles colored with arsenical pigments, such as Schweinfurt's Green and Paris Green.

It is, however, to the occurrence of arsenical poisoning in consequence of its use in the treatment of disease that I wish to call especial attention, and because of the fact that the drug is so largely used in the treatment of the various dermatoses, it would be well first to consider what are the indications for its use.

It may be laid down as a general proposition that arsenic is contra-indicated in all dermatoses of an acute nature. This not only applies to acute diseases of the skin but also to certain acute exacerbations of such chronic diseases as psoriasis and lichen planus. Among the chronic diseases of the skin, on the other hand, it may be of great benefit and is often the only drug at our command which holds out any hope of relief. In general it may be said that wherever local stimulation is indicated, as for instance with the tar preparations, arsenic may be given internally with benefit.

Arsenic is probably more universally used in the treatment of psoriasis than in any other disease. It is of more benefit in the cases of long standing, but may do more harm than good if given during an acute outbreak. In spite, however, of the frequency with which brilliant results may be obtained from the use of arsenic in psoriasis, we must bear in mind that not infrequently the lesions disappear under local treatment alone or with the aid only of proper diet. In fact, the lesions of this disease occasionally disappear while no treatment of any kind is being carried out. And on the other hand patches may persist in spite of long continued use of arsenic and local stimulation.

Again, in lichen planus, arsenic may be of great benefit, at least in the more chronic forms of the disease. But we must bear in mind that the success often follows the use of salicylates or of mercury. Zeissler goes so far as to state that in his opinion, arsenic is absolutely contra-indicated in lichen planus. It most certainly is contra-indicated in the acute cases.

In pemphigus and dermatitis herpetiformis, arsenic is often our only resource and yet even here it frequently fails utterly. The drug is of occasional benefit as a tonic in selected cases of chronic eczema and acne vulgaris but in these diseases we have other means at our command that make the use of arsenic superfluous.

Recently, arsenic has been very extensively used in the treatment of syphilis. In the form of atoxyl it had a very extensive trial, particularly in France and Germany. For a time, the brilliancy of the results gave rise to the hope that we had at last obtained a drug which could be safely used as a substitute for mercury. It soon became evident that this preparation of arsenic had belied its name and was in fact highly toxic, giving rise to so many cases of blindness from optic atrophy, that it has practically been entirely abandoned.

About a year and a half ago, Ehrlich placed in the hands of a few clinicians, a new preparation containing arsenic as its active principal, claiming for it a very low degree of toxicity and expressing the hope that it could be used in a sufficiently large dose to completely rid the patient of spirochetae. This preparation, under the trade name of Salvarsan or 606, has had a very extensive trial, both in Europe and America. It now seems evident that the drug is to fall short of Ehrlich's hopes but it seems to meet a definite need in properly selected cases.

As the drug is usually given only once, we would hardly expect any of the more chronic manifestations of arsenical poisoning to result from its use, and in fact no reports of such effects have as yet appeared. There are, however, a great many cases on record of rashes, developing within a few days of the injection and as a rule accompanied by chills and fever. These eruptions are in no way different from the rashes following the internal administration of arsenic in susceptible individuals and will be described more in detail presently. There have also been a few cases of herpes zoster following the injection of Salvarsan. This, as is well known, is a lesion not infrequently following the administration of arsenic.

It is possible that in the future, cases of chronic arsenical poisoning may follow the use of Salvarsan. The drug is now being repeated in cases where it has failed to complete a cure. The fact that arsenic is stored up in some of the internal organs, especially in the liver, in patients treated with this drug, would lead us to look for late by-effects, particularly in patients who had received more than one injection.

Within the last few months, another arsenical preparation has been brought to the notice of the profession in the treatment of syphilis —namely, the cacodylate of sodium. As yet its use has been too

limited to draw any conclusions as to its toxicity. It appears to be less toxic than atoxyl and so far as I am able to learn, no cases of poisonous manifestations have been reported.

That arsenic is a remedy of great value in selected cases of skin disease cannot be denied but it should not be indiscriminately employed, even in such diseases as psoriasis, lichen planus, pemphigus and syphilis. Cases of therapeutic arsenical poisoning are naturally largely drawn from patients treated for various chronic dermatoses, although there are cases on record of intoxication following the use of the drug in the treatment of chorea, epilepsy and various forms of anemia. The form of the drug most commonly used is the liquor potassii arsenitis, better known under the name of Fowler's Solution, but the preparation given seems to have little or no influence in determining whether the patient will develop manifestations of poisoning or not. The quantity of the drug necessary to give rise to symptoms of intoxication varies within wide limits.

Besnier has very aptly said that it is not the medicine but the patient which causes the intoxication. The mode of application and the form in which the arsenic is given makes little difference. It seems to be largely a matter of individual susceptibility, of idiosyncrasy in other words. Given the same dosage and the same mode of ingestion, the results will vary greatly as is shown by the great variety of manifestations recorded in the epidemics due to contaminated beer, wine and bread. In the presence of the same poison, one patient will present only a feeble reaction or none at all, another will have cutaneous manifestations, another will suffer from lesions of the nervous system. The general cause is the same but the organs react according to the individual susceptibility to the poison. It is impossible to say whether this individual susceptibility is due to variability in the speed of elimination or a difference in the resistance of the different tissues, or to a combination of both these causes. Experimental research has failed to develop any tolerance to the drug. Brouardel found that after feeding an animal for a considerable period with arsenic in doses just short of intoxication, he was unable to increase the dose without producing symptoms of poisoning.

These results are at variance with the facts known in connection with the Styrian arsenic eaters. These people are known to develop a very considerable tolerance for the drug and take in a single dose, quantities of arsenic sufficient to kill many ordinary individuals. By this extensive use of arsenic, the Styrian men are said to be larger and stronger than the average and the women to possess more beautiful complexions.

Lander Brunton tells of a quack in England who made it a practice to feed arsenic to children, thus keeping them in a sleek and well nourished condition. If for any reason they were taken to some other physician, they promptly began to decline and had to return to the quack in order to recover their health, for of course he was careful to furnish the medicine himself.

In spite of these facts, however, it is well known that no considerable tolerance for arsenic is developed from its ordinary therapeutic use and that it does not give rise to a habit as do many of the narcotic drugs.

As has been repeatedly demonstrated, arsenic is eliminated in considerable quantities by the sweat and its presence can be demonstrated in the skin and hair of individuals who are taking the drug. Naturally, therefore, we look to the skin for manifestations of poisoning. The main cause, apparently, of the cutaneous lesions of arsenical poisoning is the presence of the drug in the skin and its action by direct contact. Undoubtedly, however, there is another factor in the causation of the skin manifestations of arsenical poisoning, namely the action of the drug on the vasomotor centers and on the nerve trunks.

A great variety of eruptions have been described which may be traced directly to the action of arsenic. Some of these appear to belong especially to the acute phase while others do not manifest themselves until the drug has been taken for an extended period or in relatively large amounts.

Among the early lesions, perhaps the commonest is simple erythema. This form of eruption, as a rule, appears so early that it is in all probability due to the action of the drug on the vasomotor centers. Like other arsenical eruptions, it is apt to have a blotchy character, the intensity being unequal on different parts of the body. It thus may assume an appearance very like erythema multiforme. Often the erythema is accompanied by urticarial wheals and papules. These lesions are very evanescent and soon disappear if the administration of the drug is not continued. It is this erythematous rash which is so commonly met with after the administration of Salvarsan. Not infrequently the erythema instead of fading may be followed by a crop of vesicles or even bullae, which end either in desquamation or pass over into pustules and ulcers.

Another early symptom is edema. This is also very evanescent and usually accompanied by hyperidrosis. These early phenomena are probably due to the action of the drug on the nervous system, although the hyperidrosis may be partly caused by direct local stimulation of the sweat glands. The excessive sweating persists during the process

of elimination and undoubtedly plays a very important role in the causation of the later eruptions, especially of keratosis.

These early lesions develop rapidly and disappear quickly so they are of little importance except as a danger signal.

It is to the later manifestations of chronic arsenical poisoning that I wish to call particular attention on account of their tendency to persist and to terminate in disastrous consequences.

Of these, pigmentation is perhaps the most frequent. It is less than a century since this melanosis was first recognized as due to the action of arsenic. Thomas Hunt first recognized the association between excessive pigmentation and the administration of arsenic in 1847. Pigmentation does not usually appear until the drug has been taken for a considerable period of time. There is only one case on record in which melanosis followed a single dose. In this case, reported by Moreira, the patient took by mistake a dose of "rough-on-rats". The pigmentation appeared in six days and was preceded by a transient erythema. As a rule, melanosis does not appear until after the drug has been taken for several weeks and may not manifest itself for months. It may be general in its distribution but is usually in isolated scattered plaques. Hardly two contiguous areas will be of the same tint. The face, palms and soles are usually left free. The deepest pigmentation appears on the parts subject to pressure or traumatism, and in regions where physiological pigmentation is most marked. The depth of the pigmentation is subject to variations. In cases of universal melanosis, the patient may appear as dark skinned as a mulatto. Arsenical pigmentation is usually rather persistent. After the drug is discontinued, it very slowly disappears, with or without desquamation. It is probable that desquamation is an elimination process for the scales contain a demonstrable quantity of arsenic.

The pigment, itself, is in the form of melanin, chemical examination of which has failed to show the presence of either arsenic or iron. This melanin is distributed through the epidermis, extending from the deeper layers to the surface. A small quantity has been found in the cells of the corium. A satisfactory explanation of how arsenic taken internally gives rise to this marked increase in the pigment deposit in the skin is still wanting.

One of the most characteristic and at the same time most serious symptoms of arsenical poisoning is hyperkeratosis. This phenomenon has been recognized as due to arsenic only in our own generation. Erasmus Wilson was the first English author who noted keratosis about the orifices of the sweat glands and ascribed it to the use of arsenic.

The French give Besnier the credit for first making this observation.

Arsenical keratosis is seen in its most typical form on the palms and soles, although it is not confined to these regions. In many cases, the horny layer of the whole palm becomes thickened more or less irregularly. This keratosis is habitually accompanied by hyperidrosis and therefore there is no tendency to fissuring or desquamation. Usually, however, and by far more typical, is the nodular form which is characterized by horny plugs comparable to miniature corns. According to Geyer's investigations, these plugs are always perforated by a sweat duct. This observation has been disputed by other competent investigators and cannot be settled until further work has been done. The central part of the palm is, as a rule, very little affected, the horny plugs being along the sides of the fingers and in the interdigital folds. Mixed types are not infrequent.

Arsenical keratosis is an evidence of chronic arsenical poisoning and may not appear for months or even years after the drug has been taken. It is not uncommon for the keratosis to be preceded for some time by tenderness and erythema of the palms and soles, a circumstance which led, in the English beer poisoning epidemic, to the expression "tenderfoot ale" being applied to the contaminated beverage. This hyperemia, however, is not essential to the development of the keratosis. The beginning of arsenical keratosis is insidious and its exact onset in point of time hard to determine in a given case. It is not uncommon for keratosis of the palms and soles to persist indefinitely after the drug has been discontinued, and when it disappears, it does so very slowly. It is probable that here too, as in the case of melanoderma, we are dealing with an eliminative process and that the keratoses are due to the local action of the arsenic on the cells of the epidermis.

It is in this tendency to persist that the danger of arsenical keratoses lies. There are now on record, nineteen cases of arsenical keratosis that have terminated in carcinoma, the first having been reported by Jonathan Hutchinson in 1887. All of them have been in patients who had taken arsenic for long periods of time, ranging all the way from ten to thirty years. In most of the cases, the drug was taken for psoriasis. Among other diseases, for which the drug was prescribed, were pemphigus, acne, chronic bronchitis and epilepsy. In several cases, the onset of the carcinoma was some time after the arsenic was discontinued, in one case as much as ten years had elapsed. Thus, although the arsenic was the cause of the keratosis, it was only indirectly responsible for the development of the carcinoma which arose as a result of the constant irritation of the thickened horny layer.

In this series of cases, the development of the carcinoma was slow, but there was a tendency for it rapidly to assume grave portent in the shape of metastases. Most of the cases ended fatally. In many, the carcinoma was multiple.

One other form of skin lesion is sufficiently characteristic of idiosyncrasy for arsenic to deserve special comment—namely, herpes zoster, Arsenical zoster was first recognized by Jonathan Hutchinson in 1868. The lesions, as a rule, appear after the maximum dose is reached and after the drug has been taken for five weeks to three months. It appears while the patient is still taking the arsenic. As already mentioned, there have been a few cases of arsenical zoster, following a single dose of Salvarsan. The eruption is practically always in the skin areas supplied by the cervical and dorsal roots and in no way differs from ordinary herpes zoster. These patients are, as a rule, immune to a second attack, the same as in cases of ordinary zona but there have been a few instances recorded in which the eruption recurred after a second course of arsenic.

The exact way in which arsenic brings about changes in the skin has been a subject for much speculation and theorizing and I shall not attempt a full exposition of the subject. Liebig held that it acted by entering into chemical combination with the protoplasm of the cells and thus arrested activity. The reverse of this, however, seems nearer the true explanation of the facts.

Arsenic does not combine with albumin and does not arrest cellular activity, but on the contrary it stimulates the protoplasm to greater activity.

This stimulation, according to Binz, is due to the liberation in the tissues of oxygen. Arsenic forms two oxides, one with two atoms of oxygen more than the other. When $As_2 O_5$ comes in contact with air, water and organic matter, it is reduced to $As_2 O_3$ thus liberating two atoms of oxygen. This reduction takes place only where protoplasm is alive or dying. It will not occur in dead matter. Other elements have been found to have this same property of carrying separable, energetic atoms of oxygen, among these may be mentioned lead, phosphorus, antimony, bismuth and nitrogen.

When oxygen is liberated slowly and in moderate quantities, the result is a formative tendency. This theory is borne out by the fact that if arsenic is fed to horses and sheep, there is improvement in the condition of the hide, as well as an increase in size. Giess found that by feeding arsenic to rabbits, he could make them grow to enormous size. If, on the other hand, the respiratory process is accelerated and the oxygen is rapidly given and taken, the nutritive processes of the

cells are hurried on beyond their power of endurance. The result then is exhaustion, degeneration, atrophy and finally death of the tissue.

Epithelium shows an extraordinary affinity for arsenic. It is therefore natural to find a great variety of skin lesions in arsenical poisoning.

The drug is carried to the basal layers and passed on from cell to cell, being finally cast off in the desquamating scales and hairs. The changes produced are essentially nutritive, the tissues in the early stages presenting a condition of well being. Under continued action, degeneration processes and deposit of pigment takes place. Still later, there is atrophy, and the epidermis may be very much reduced in thickness. In very advanced cases, there is degeneration of the glands of the skin, the sweat and oil glands.

It thus becomes evident that, although arsenic is a drug which is of very great value in the treatment of certain diseased conditions, yet it must be borne in mind that we are dealing with a powerful poison, capable of doing a great deal of irreparable harm when used indiscriminately. It therefore behooves us to use this drug with caution and only where the indications are clear, especially where we are dealing with a chronic disease in which the medication must be continued over an extended period of time.

**Discussion.**

Dr. L. Schiller, Milwaukee: Dr. Washburn's paper has in a very succinct and complete manner covered the field of operation of arsenic in dermatology as well as a general consideration of the physiological effects of the drug.

I have very little to say about the action and use of this drug, which is one of the first ever employed in medicine; but I should like to point out some facts more strongly in regard to the toxicity of arsenic in its most recent application in syphilis.

Dr. Washburn has very properly said that the different arsenical preparations or chemical combinations have different degrees of toxicity, and this fact has been more recently made use of in the combinations which have been made with the coal tar preparations and arsenic. The effect of the coal tar preparations in combination with arsenic is not the same when used therapeutically as the effect of the drug as formerly used in ordinary dermatological practice.

Arsenic as given in former times has only been given either in very small doses with a view of improving the general metabolism of the body, in other words, as a tonic, or it has been given as a nerve stimulant, and in the latter application of the drug the dermatologist has been more concerned, while the general practitioner has been concerned more especially in the use of the drug as a general tonic, in very small doses only; because the remedies which have

been used so far, if given in larger doses, always produce the toxic effects which were far sooner obtained than any of the desired systemic effects could be obtained.

Now, the remedy, as you all know, which has been introduced by the remarkable efforts of Ehrlich, the diamidoarsenobenzol, or salvarsan, certainly has opened up an entirely new field of operation for the old remedy arsenic, which has within the last few years rather become discredited as a remedy from the very fact of the almost universal use of the drug for dermatological purposes by every practitioner, whether it was indicated or not. At last we have found something which has really a distinct specific effect, and this very specific effect and the ability to use this drug in such large doses to produce this effect, is the result of the comparative nontoxicity of the remedy when indicated. The fact is that the arsenic in this combination does not destroy protoplasm when it comes in contact with it, consequently we can give the arsenic in large doses. And Dr. Ehrlich in his experiments has found that the diamidoarsenobenzol kills spirilla in their different forms, not only the spirocheta pallida, but also the spirillum of recurrent fever and other species that we do not see.

This very fact has induced him to develop his therapy which has obtained some slight modification since he first introduced it. The action of salvarsan or 606 is to enter the blood and to directly ferret out the spirillum or the spirocheta, and it now looks as if some of these spirochetae hid away in some organs and were not killed or destroyed by the first onslaught of the battery of the arsenobenzol, but it was found later on that if after a week or ten days from the first treatment another treatment is given, especially if it is given by intravenous injection, that the results are better than if only one injection is given. This is explained on the ground that after the first onslaught a certain number, the larger number, in fact almost all the spirochetae, are destroyed, that after the arsenic has again left the system those hiding spirochetae come out into the circulation, and again in course of time when they feel that the enemy is no longer there, they attack the tissues or produce other symptoms of syphilis. But if the second dose of diamidoarsenobenzol is used, these spirochetae which have been coming out after the first injection are destroyed. It is found that this method of treatment will produce very much better results than the single injection.

Ehrlich also advises the use of an oil emulsion of the drug, after a period of a month or six weeks from the second injection—an injection into the gluteal region as a reservoir which will gradually empty itself into the system, and thus destroy the few straggling spirochetae, and that would then finish the enemy.

I have not anything more to say about arsenic, except that the stimulation of the vasomotor nervous system seems to be that effect which we make use of in our dermatological work; that the stimulation of the nervous system is a quantity which shows itself in different degrees as the individual responds; the idiosyncrasy of the individual has everything to do with the effect which we may or may not get with the use of arsenic; and also has everything to do with the secondary effect which we may or may not get with this drug.

The stimulating effect upon the vasomotor system may result either in a beneficial or in a detrimental manner. A slight stimulation will improve conditions, and over stimulation will make conditions worse and will lead to

more or less disastrous results. Therefore, it is very necessary that we use arsenic in a very tentative manner in every individual case; that we make use of it so that the secondary deleterious results will not be brought about, and that we may not do more damage with it than good.

Dr. C. A. Baer, Milwaukee: As regards Dr. Washburn's statement about sodium cacodylate, it seems not to be settled as far as surgeons are concerned. I think as far as dermatologists are concerned it was settled 15 years ago when Neisser and others experimented with it very thoroughly on animals and human beings, and although it was claimed that the drug produced no accidents, nevertheless it produced very poor results, and from a dermatological standpoint it was definitely settled to be of no use.

As regards 606, poisoning and other accidents are beginning to appear in the literature, and I think it is of sufficient importance to relate some of them.

Of course the method of administration of 606 depends on what you wish to do. There are the subcutaneous, the intra-muscular and intra-venous injections. The subcutaneous we do not use because of the danger of forming large abscesses which break down and which are difficult to heal, and sometimes probably will never heal. One case in particular, in Chicago, was treated by subcutaneous injection over the right lower ribs some time ago; came up to Milwaukee about 18 days later and exhibited an enormous tumor at the point of injection. Incidentally, I might say, the patient had herpes of the prepuce and had received the injections on a false diagnosis. The tumor was reduced somewhat by applications, but had finally to be treated surgically. Upon opening the tumor the surgeon found that the muscles underlying had become entirely necrosed. The 606 had penetrated into the surrounding muscles and gone to quite a distance and beside penetrating downward had involved the external intercostal muscles, and if not operated on would shortly have penetrated into the thoracic cavity. You see, therefore, what a dangerous sort of a thing a subcutaneous injection is.

One other patient received a subcutaneous injection in the back, without any relief of symptoms, and he presented himself subsequently with symptoms similar to those that he had been suffering with right along, and upon examination it was found that he had a large tumor in the back entirely encapsulated where the injection had been made. In all probability this was the salvarsan which had been encapsulated and stayed right there, and the patient got no benefit as regards improvement in health.

The intramuscular method is used if you wish to have an action prolonged over several days or weeks. The injection is given deep into the muscles of the buttock or the intrascapular region. When possible we give the injection in the buttock, and although uncomfortable, there is no other way out of it. The pain is not severe except for the first 24 hours. After that it is a dull ache which the patients can stand very well.

As regards the injection with the intravenous method, that is used when you wish very rapid results, within a day or two. The injection is made directly into the vein. It is not necessary to describe the apparatus and methods. One abscess resulted from an intravenous injection in which the veins were very small and deep, and it was impossible to get into them without some surgical procedure. In trying to get into the veins a small amount of the salvarsan was spilt into the surrounding tissue, and while it caused no inconvenience or pain, still it formed rather a large boil. Cultures were made

which were entirely negative. Microscopically nothing was seen except a mass of detritus. The abscess that resulted from the injection was undoubtedly a chemotactic one rather than one produced by bacterial invasion.

Accidents are being reported right along. One very serious accident which resulted in general neuritis of the entire body, occurred in the case of a patient who was injected in New York some time ago, subsequently came to Chicago, and about ten days after the injection in New York the patient suddenly lost control of all the muscles of the body with the exception of being able to move his jaw a little bit. By treatment, keeping in bed, etc., and proper medical attention the condition improves gradually. After a few weeks, however, tnere was a sudden return and the patient again lost complete control of all the muscles, complete paralysis due undoubtedly to arsenical neuritis. The patient is now improving. That was one of the early injections of salvarsan. But now I think that as the remedy is being used extensively and freely a great many reports of accidents due to intoxication from the arsenic will be reported, particularly now that the patient is being given a number of injections. Of course an enormous amount of arsenic is introduced at a time, anywhere from 1½ to 3 grains being introduced at an injection.

What I wish to particularly draw attention to is the caution to avoid the indiscriminate use of 606 so as to prevent as far as possible the arsenical intoxications, which will come especially after several injections of the drug.

Dr. A. J. Caffrey, Milwaukee: I have had some experience with cacodylates, and I must disagree with Dr. Baer about their being of no use whatever. I have been using them since Dr. Murphy's article first appeared in the Journal of the American Medical Association, and I found them very valuable. In some cases I secured results where 606 had failed. I have been using the 606 in conjunction with sodium cacodylate and comparing both treatments, and I find that I secure better results from the cacodylates than from the 606. Of course it might be due to the technique. I used the intramuscular injections about 6 times and the intravenous once, but I have not had the results that are claimed for 606. In one case I had a very bad result—at least I think that the case progressively got worse after the injection of 606. The man came to me early in January with a history of syphilis, and a Wasserman made by Dr. Baer was positive. He seemed to think he was developing locomotor ataxia. He had that on his mind all the time. He said when he would run to catch a car he would trip himself; and after awhile he developed a sort of suicidal mania. I came to the conclusion that he did not have the ataxic gait, but that he was rather slowly developing paresis, but I did not come to that conclusion until I had given the 606. But from the time he got 606 he progressively got worse and worse and eventually about 3 months after he had gotten the treatment, he was found dead in bed in the hospital. Autopsy was refused; but I came to the conclusion that death was due to the reaction set up by the salvarsan around a syphilitic gumma somewhere in the brain thereby causing a vessel to break. Since then I have not used 606, but I have been continually using the sodium cacodylate in 3 grain doses every other day; and for a while I used it in 3 grain doses every day for 10 days, and then reduced to every other day. I am inclined to think that we are afraid of arsenic; we have always been afraid of arsenic; but the cacodylates particularly are the least toxic of all the arsenical preparations. I have a letter from a physician in Los Angeles who used 25 grains in one injection

on himself. He states so in his letter. Some of the authors claim that its tolerance is due to the slow liberation of the arsenic in the system, and the elimination through all the secretions. After a couple of doses you can get that garlic like odor, not only from the breath of the patient, but from his skin, so that it is eliminated in the perspiration, in the urine, in the breath, and it is eliminated in all the execretions. I think that is the reason that it is not as toxic as arsenious acid and other arsenical preparations. But I am inclined to think we were always afraid of arsenic; we were afraid of arsenic before Ehrlich gave us 606, yet with that treatment we give more than 3 grs. in one injection. We never gave it in larger doses than a 50th or a 60th of a grain before. But the drug is useful, and the sodium cacodylate being the least toxic is the preparation, in my mind, preferably to be used.

Dr. Robert G. Washburn, Milwaukee (Closing): I think we use arsenic altogether too much, and it is a good thing that we are afraid of it.

---

## AXIS TRACTION FORCEPS.*

BY J. P. McMAHON, M. D.,

MILWAUKEE.

The obstetric forceps, a useful and at times very necessary surgical instrument, like all other surgical equipment, has gone through different stages of development and evolution. Crude patterns are said to have been in use before the Christian era. The first instrument of which we have definite knowledge—the Chamberlen instrument—was conceived of early in the 17th century and occupied the field alone for nearly a century and a quarter when Palfyn presented his forceps, a cruder and much less efficacious instrument inasmuch as the arms did not articulate. About the middle of the 18th century Leveret in France and Smellie in England, apparently independently of each other, introduced the pelvic curve and laid the foundation for the latter day ordinary forceps.

Shortly after the advent of the Leveret and Smellie models, obstetricians began to study more carefully the shape and diameters of the birth canal and the varying directions of its axis. From these investigations it was seen that even the Leveret and Smellie models failed to meet all requirements; and ever since, there have been attempts made at axis traction by many different means. Saxtorph as early as 1772 attempted to make traction in the axis of the canal by attaching laces to the fenestrae of the blades and pulling on the laces as well as on the handles. Pajot followed with an attempt to per-

*Read at the 65th Annual Meeting of the State Medical Society of Wisconsin, Waukesha, June 8, 1911.

form axis traction by pressing downward on the shanks and pulling upward on the ends of the handles. In 1844 Prof. Hermann of Berne produced the first axis traction instrument by attaching rods to the shanks on which he pulled from below or pushed from above. Hubert

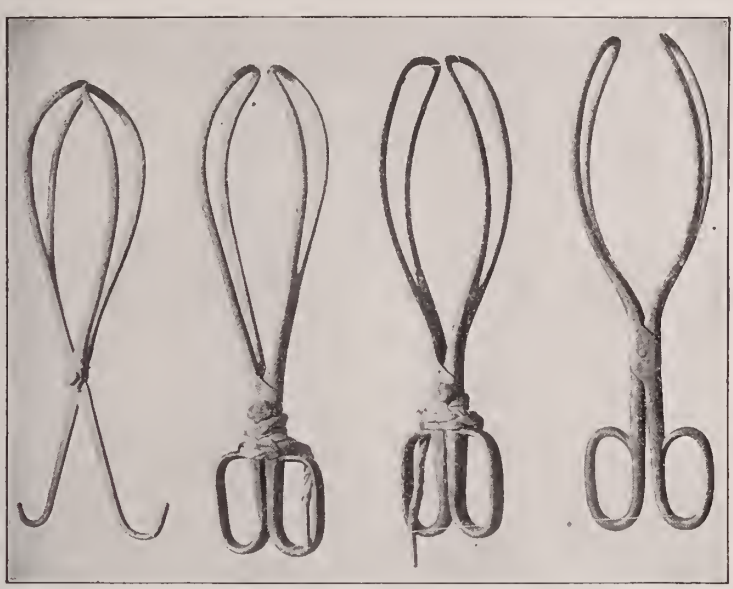


Fig. 1.—The four forceps found in the Chamberlen chest. (Hirst's Text Book of Obstetrics.)

followed in the eighteen sixties with an attempt to make axis traction by adding a rigid right angled bar to the handles and exerting traction on the bars, and Poullet still later tried to bring about axis traction by passing tape through the center of the blades, a method similar to that of Saxtorph.

Finally, in 1877, Tarnier of Paris presented the profession with

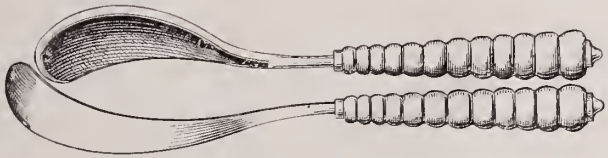


Fig. 2.—Palfyn's forceps or "hands." (Hirst's Text Book of Obstetrics.)

an instrument, the use of which even by an inexperienced operator insures more or less perfect axis traction and at the same time does not interfere with normal mechanism nor with the natural movements of the head. The Tarnier instrument, like the ordinary forceps, is

composed of two arms. These are held together by a set screw and a cross-bar. Each arm is composed of handle, shank, and blade. The essential parts of the Tarnier instrument from the view-point of axis traction are two traction rods passed through the heels of the blades

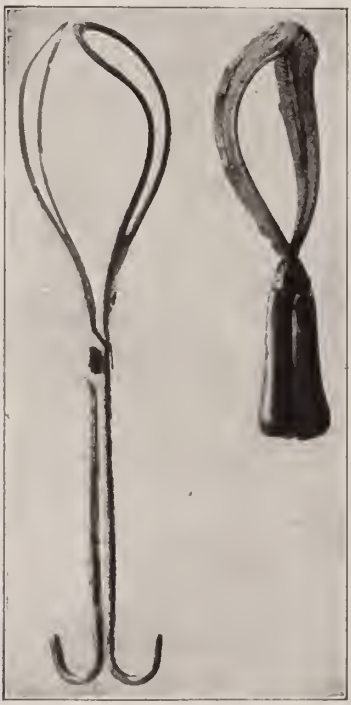



Fig. 3.—A, Levret's forceps with a pelvic curve; B, Smellie's forceps with a pelvic curve (Hirst's Text Book of Obstetrics.)

2.5 cm. posterior to the proximal ends of the fenestrae. These traction rods terminate, under the lock, in hooks which articulate with the proximal half of the traction apparatus. This proximal half has an acute perineal curve, at the end of which is attached a transverse bar or traction handle. The rods may be hooked to the shanks when not in use. The joints at the attachments of the traction rods to the blades and the joints at the attachments of the handle to the traction rods and of the cross-bar to the proximal end of the handle, respectively, are loose. The latter two are of the swivel variety, thus permitting the greatest possible freedom for normal mechanism of the head in its passage through the canal. In the writer's opinion the freedom of

head movements allowed by the Tarnier instrument is quite as important to the mother and more important to the fetus than the provision for axis traction. Theoretically the traction rods should pull from the center of the blades; this would be difficult to arrange, and attachment to the heels of the blades practically answers all indications. The

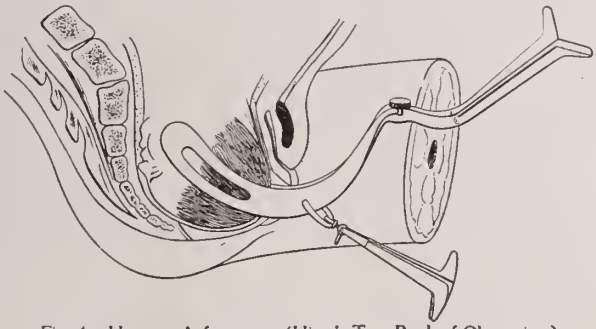


Fig. 4.—Hermann's forceps. (Hirst's Text Book of Obstetrics.)

construction of the axis traction handle is such that if the traction rods are held about 1.5 cm. away from the shanks and all traction be made on the axis traction handle, the blades of the forceps will maintain a normal relation with the axis of the passage as the head descends. The handles of the forceps of course change their direction with the changing directions of the blades and thus serve as an idex to the proper line of traction. All other modern axis traction forceps are

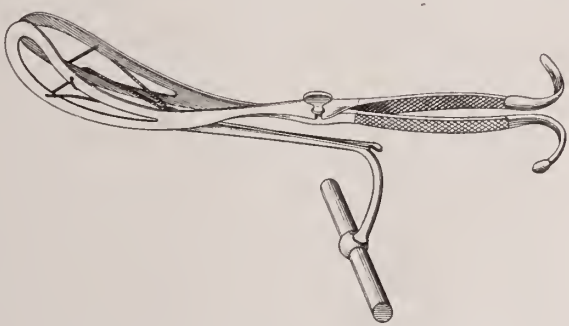


Fig. 5.—Poulet's forceps. (Hirst's Text Book of Obstetrics.)

modifications of Tarnier's, designed to afford one or more improvements on the original model.

Among the better known modifications of Tarnier's instrument may be mentioned Lusk's, which differs from Tarnier's in that it is lighter and that the traction rods are attached to the lower part of the blades 3.5 cm. anterior to the proximal end of the fenestræ; Simp-

son's which is also lighter than the original Tarnier model, in which the traction rods are fastened to the blades at the same points as in the Tarnier instrument; but the traction rods are longer, continuing through the perineal curve and terminating so as to afford attachment for the traction handle which is permanently riveted to the left traction rod, this arrangement doing away with loose pieces and promoting solidity; but the joints in the Tarnier models perform a distinct function while the long traction rods in the Simpson's models interfere with the termination of the delivery unless they be removed when they are no longer necessary; the Milne Murray, which is very scientifically constructed, but the traction rods of which are long and interfere in terminating delivery even more than does the Simpson; and the Jewett, which is constructed on the formula of Milne Murray,

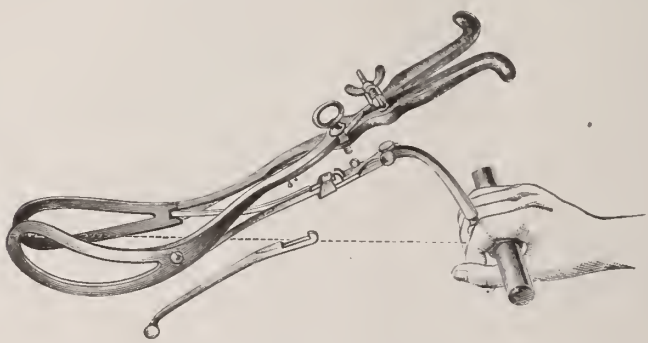


Fig. 6.—Tarnier's axis-traction forceps. To show the details, the hand is represented in an improper position for traction; below; is one of the traction rods. (Hirst's Text Book of Obstetrics.)

but is lighter. The traction rods in the Jewett terminate anterior to the lock and therefore the perineal curve and traction handle can be removed when it is desired to conclude the delivery of the head by the forceps. There is of course no objection to using a short perineal instrument for this latter purpose. Many other modifications of Tarnier's might be mentioned, each of which was designed to meet some special indication of merit. On the whole the latest Tarnier model meets every requirement for performing axis traction and for concluding delivery. Jewett's would be the writer's second choice for general use. The attempt to perform axis traction by the Saxtorph or by the Pajot method or by attaching hooks and handles to the fenestrae of an ordinary forceps, are all inferior means and should give way to the more perfect method made possible by the Tarnier instrument or one of its modifications.

The indications for the use of axis traction forceps are the same

as the indications for the use of any of the older forceps. It is particularly indicated and none other should be used in cases requiring application at the superior or middle straits or in the delivery of the after coming head in breech presentations. Axis traction forceps have been used in France and England since 1877. They have been used in Austria for a number of years and they are being used in The University Clinic at Berlin for high and low applications alike. They have been used by teachers and leading obstetricians in this country more or less since 1880 but they are almost a novelty among the rank and file of those doing obstetric work. It is safe to predict that if the general practitioners of this country were better acquainted with the axis traction principle, with the advantage of employing a forceps which permits the greatest possible freedom for normal mechanism of

Fig. 7.—A. B. proper position of handle and proper line of traction, head at sup. strait; X. Y. improper. (Williams' Obstetrics.)

the head and with the nicety with which the modern axis traction instrument meets these indications with a minimum expenditure of energy on the part of the operator, it would promptly become quite generally used even though it does necessitate the purchasing of an additional instrument.

The technique of application is quite the same as in the application of the Leveret or Smellie models plus the attachment of the traction rods and handle. All one has to remember in addition to the knowledge necessary to the intelligent use of any forceps is to observe the direction of the application handles and exert traction in that direction. This is done by keeping the handle-bar in a horizontal plane and by keeping the traction rods 1.5 cm. beneath the application handles when using a Tarnier instrument and by keeping the traction rods in contact with the application handles when using Simpson's and other models.

The advantages of the axis traction forceps may be briefly stated as follows:

Owing to the presence of numerous joints in the traction attachments, the instrument can be used in any position.

The force of traction is exerted in the axis of the canal instead of wasting it and doing positive harm by directing the head against the symphysis.

It permits more or less normal head mechanism.

The amount of traction necessary to delivery is greatly reduced.

It makes possible deliveries which otherwise would have been impossible by means of forceps.

It substitutes mechanism for judgment, experience and dexterity, thereby reducing to a minimum the more common injuries to the mother and fetus.

A plea is here made for its universal employment when high and middle applications are necessary.

---

The author is indebted to the W. B. Saunders Co. of Philadelphia for their courteous permission to use plates 1 to 6, and to D. Appleton & Co. of New York for the use of plate 7.

---

# RUPTURE OF ABDOMINAL VISCERA WITHOUT EXTERNAL INJURY.*

BY JOSEPH F. SMITH, M. D.,

WAUSAU.

It is not the purpose of this paper to collect or report a series of cases belonging to the group of injuries indicated by the title nor to attempt to add anything original to the very extensive literature on this subject. Many hundreds of cases of injury to intra-abdominal organs with little or no external evidences of trauma have been reported and a very superficial search of the literature will reveal reports of such cases in which all of the abdominal organs and tissues have been injured more or less extensively and with greater or less degrees of seriousness.

It seems, however, that the serious consequences that may follow what are too often regarded as insignificant abdominal injuries are in no wise appreciated by the laity and, I fear, in many instances,

---

*Read before the Ninth Councilor District Medical Society, Grand Rapids, July 27, 1911.

physicians are disposed to take entirely too optimistic and conservative a view of this class of injuries. It is merely with the idea of presenting to our minds a picture of this type of injury and the consequences that attend that a brief recital of a case recently coming under observation may be worth while.

A young farmer, aged 27, engaged in mowing hay, walked beside his team and struck one of the horses with the line. The horse kicked him in the lower right side of the abdomen but did not knock him down. He walked some distance after the injury but fainted and was carried into a house. He complained of pain in the abdomen and later vomited and still later passed bloody urine. A physician was called and administered something for the relief of the pain and vomiting. The patient remained in this condition during the next two days, the pain and vomiting continuing. Early in the morning of the fourth day I saw the patient in consultation, the physician in attendance at that time stating that two attempts at catheterization had yielded only a few drops of urine at each attempt. The patient presented at this time all the symptoms of impending death from general peritonitis. He was slightly delirious, very restless, vomited at frequent intervals, the abdomen was very hard and tense with but little distension, there had been no evacuation of the bowels for several hours, the extremities were cold and the radial pulse could not be felt. Death followed about two hours later and no autopsy was permitted, the physician who first saw the case advised his removal to a hospital, but this was declined by the patient and his friends.

From the facts obtained as to the history of the case and the condition present at the late hour at which the patient was seen, it seems that in all probability the patient sustained an intraperitoneal rupture of the urinary bladder with leakage of urine into the abdominal cavity and general peritonitis. Externally little or nothing was to be seen to indicate that the man had received a severe injury, the skin was not broken and there was little or no extravasation of blood at any point beneath the skin.

The kick was received unexpectedly as the man was walking beside the horse and the abdominal muscles were in all probability not in a state of tension. As to whether the bladder was full or empty at the time the injury was received no definite information could be obtained.

As regards the etiology of non-penetrating abdominal injuries almost any manner in which force can be applied has been described. Many of the injuries have resulted from falling from greater or lesser heights either upon the back, abdomen, or side. Being caught be-

tweeen two moving bodies or a fixed and a moving body furnishes a condition frequently resulting in serious intra-abdominal injury. Any attempt to give even a list of the different ways in which these injuries have been received in reported cases and the nature of these injuries would carry us far beyond the limits of this paper. In a large series of cases collected by Hertle it was shown that kicks in the abdomen furnished 29 per cent of the cases and being run over by moving bodies or vehicles furnished 5.2 per cent. On the whole blunt force applied over a circumscribed area furnishes about three times as many of these injuries as forces applied over larger areas. In Hertle's list of cases 167 were men and 4 women, the occupational opportunities for such injuries giving the great disparity of the sexes in this class of accidents.

In general these cases may be divided into at least three groups:

1. Those in which the signs of hemorrhage are predominant. In this class belongs the injuries resulting in bursting or rupture of the solid abdominal viscera, such as the liver, spleen, kidney, pancreas or rents and tears in the mesenteries.

2. Those in which the signs of intra-peritoneal escape of foreign material such as bile, urine, pancreatic juice, intestinal contents, etc., resulting from rupture of the gall-bladder, urinary bladder, pancreas, gastro-intestinal tract, etc. These cases are the ones that sooner or later present signs or symptoms of intra-peritoneal irritation and inflammation, and are the ones in which the late consequences are of such a serious nature.

3. A group of cases in which the early symptoms and signs are insignificant but later develop signs of peritonitis. In this group we may include these cases of extensive tearing of the mesentery with gangrene of the bowel following or hematoma of the mesentery with pressure necrosis of the mesentery and bowel. Another group of cases falling into this class are those in which the sympathetic nerve ganglia are injured either by the force applied or by pressure of hematomata producing later paralytic ileus and marked distension of the bowel without the signs of peritonitis.

Heinecke has described a group of four such cases in which following an injury to the upper abdomen by blunt force marked meteorism supervened without increase in the pulse frequency or rigidity of the abdominal wall. All these cases recovered.

In the cases included in the first group, namely those in which the signs, such as anemia, dullness in flanks, etc., point to intra-abdominal hemorrhage, the indication is clear to open the abdomen and arrest the bleeding, provided the patient's condition will permit

such a procedure. A discussion of the methods to be used in such cases would carry us too far afield at this time. Suffice it to say in a general way suturing of the rupture when feasible and reasonably safe is the method of choice. When for good reasons the method of arrest by suturing is not applicable, we may resort to the old reliable method of packing depending upon pressure and clotting to arrest the bleeding.

Coming now to the second group in those characterized by rupture of hollow viscera, escape of foreign material into the cavity, we find that rupture of some part of the intestinal tract furnishes the larger percentage of cases. In general rupture of the bowel occurs:

1. By bursting due to pressure upon liquid or gaseous contents in a circumscribed area or loop or

2. By crushing, cutting, or tearing in cases in which the bowel is crushed between the spine and some foreign body particularly between the sacral promontory and a solid body. These injuries may result in actual cutting or crushing of the bowel, or if the force is applied in a glancing manner the bowel may be torn from its mesentery or extensively ripped and torn. Those portions of the bowel with a short firm mesenteric attachment are particularly liable to the tears resulting from forces applied in an oblique or glancing manner. For this reason the upper part of the jejunum is particularly liable to tearing injury because of its firm, short ligamentous attachment at the point of emergence from behind the mesentery.

In the cases of injury by tearing experiments show that the serosa is the first to give way, then the muscularis and mucosa, and lastly the submucosa. In the injuries by crushing the *mucosa gives way first and the serosa last.* This fact is important since serious injury to the bowel may be overlooked because the serosa is intact, when in fact all the layers underneath it may be crushed and lacerated.

The small intestine furnished 92 per cent and the larger intestine 8 per cent of the cases of injury to the bowel by the application of blunt force externally. This is due to the greater mobility of the large bowel because of its larger mesentery and to its location in the lateral fossae of the cavity.

Unfortunately there are no symptoms pathognomonic of rupture of the bowels, the problem is entirely the same as in rupture of gastric or duodenal ulcer—pain, vomiting, distension, rigidity, increased pulse rate, leucocytosis, may all have a bearing and all may be misleading. Probably the most significant single sign of rupture and beginning peritonitis is rigidity especially *local rigidity.* Those who have had large experience with perforation of typhoid, gastric and

duodenal ulcer place more reliance upon this sign than upon any other single sign or symptom.

As to treatment, here again suture of the tear is the method of choice. Resection must be done if the bowel is too extensively damaged for suture, or if the bowel is loosened from the mesentery or the mesentery is damaged to such an extent as to result in gangrene of the bowel. In cases in which the patient's condition will not permit of resection the formation of an artificial anus by bringing the ends of the injured bowel outside may be resorted to as a temporary measure. Here again as in all other bowel perforations, the mortality percentage keeps pace with the hours that elapse between the time of the injury and the time of the operation. Hertel had 29 per cent of recoveries in the series of cases reported by him as coming to operation. While this is a very low percentage of recoveries it probably includes a considerable number of cases coming to operation late as these cases are wont to do.

Rupture of the urinary bladder is produced by force applied directly upon the abdominal wall above the symphysis, upon the lower part of the back or upon the perineum, and may or may not be accompanied by fracture of the pelvis. In 80 per cent of the cases the rupture involves that portion of the bladder invested by peritoneum—intra-peritoneal rupture, and in 20 per cent of the cases in that portion of the bladder not covered by peritoneum—extra-peritoneal.

In intra-peritoneal rupture septic peritonitis ensues sooner or later depending upon the rate at which the urine and blood escape into the peritoneal cavity. Cases with a small tear and slow leakage have been operated upon as long as ten or eleven days after the injury with recovery. Tuffin of Paris has shown that urine may be injected into the peritoneal cavity of guinea pigs and rabbits without producing peritonitis, provided small amounts are injected at long intervals.

Israel and Granitz divided the ureter in dogs and allowed the urine to flow into the abdominal cavity and found that it required four or five weeks for the development of fatal septic peritonitis. In cases of traumatic intra-peritoneal rupture the escape of urine is usually rapid and accompanied by hemorrhage. This mixture of blood and urine furnishes a favorable medium for the growth of bacteria and the development of rapidly spreading general peritonitis.

Inability to make a diagnosis is, to quote Cunningham, the only excuse for delaying operative treatment. The results of expectant treatment of intra-peritoneal rupture of the bladder are shown by a series of 94 cases reported by Bartels with 93 deaths and a series of

143 cases collected by Ullmann with 141 deaths. The results of operative treatment are shown by a series of cases reported as follows:

Ashhurst, 110 cases, 47 deaths, 42.7 per cent.

Sieur, 34 cases, 20 deaths, 58 per cent.

Noble, 21 cases, 3 deaths, 14 per cent.

Alexander, 45 cases, 20 deaths, 51 per cent.

The effect of delay in operation is shown by the results of cases reported by Mitchell:

Cases reported within 12 hours—13 cases, 8 cured, 5 died, 38.4 per cent.

Cases reported within 12 to 24 hours—10 cases, 3 cured, 7 died, 70 per cent.

Cases reported within 24 to 36 hours—11 cases, 3 cured, 8 died, 72.7 per cent.

It will be seen from this series of reported cases that the mortality is practically doubled by the second twelve hours delay and the few cases that have survived operation after the first 24 hours belong to that very small group with small laceration and slow leakage. These cases by no means lessen the value of the rule that operation should be done immediately but rather are the exceptions that prove the rule.

Such tentative measures as catheterization, hot applications, retained catheter yield approximately the same mortality as no treatment at all.

As to methods of operation practices differ in minor details, as a general proposition in cases of suspected rupture the bladder should be opened and examined by a supra-pubic incision. If an intra-peritoneal tear is found the peritoneal cavity should be opened, the blood and urine sponged out and the bladder tear accurately closed by two layers of catgut sutures. The abdomen should then be drained by a gauze or cigarette drain carried down into the pelvis and the bladder drained either through the supra-public opening or through the urethra.

REFERENCES.

Hertle—Blunt Injuries of the Intestines and Mesentery. Brun's Beiträge, Vol. 53, Part 2.

Watson & Cunningham—Genito-Urinary Diseases.

Mitchell—Annals of Surgery, 1898, page 151.

Hienke—Meteorism after Abdominal Injuries. Langenbeck's Archiv., Vol. 83, part 4.

Senn—Traumatic Intestinal Rupture. Am. Journ. Med. Sciences, Vol. 127, p. 966.

## CLINICAL DEPARTMENT

# A CASE OF HYDATIDIFORM MOLE.

R. T. GILCHRIST, S. B., M. D.,

ASSISTANT PATHOLOGIST,

AND

L. G. SYKES, M. D.,

LATE HOUSE OFFICER, MILWAUKEE COUNTY HOSPITAL.

WAUWATOSA.

Hydatidiform Mole is probably unrecognized in many cases. This is especially true when no microscopic examination is made of the material expelled from the uterus in an abortion early in pregnancy.

That it is a serious condition, has been shown by Dorland who found an immediate mortality of 10 per cent in 100 collected cases. Williamson* in a communication read before the London Obstetrical Society in 1900, presented statistics which indicate that Hydatidiform Mole may be encountered about once in every 2,400 pregnancies. We are reporting this case on account of the comparative rarity of the condition. Although the patient was in the hospital under observation for ten days, the real nature of the morbid process was not recognized until the contents of the uterus had been expelled.

Clinical History:—Mrs. E. B., Hosp. No. 9272. 24 years of age, housewife, entered the Milwaukee County Hospital on March 2nd, 1911, on the service of Dr. C. A. Kreutzer. The immediate cause of her coming to the hospital was that on the day previous she had suffered from two hemorrhages from the mouth, which from her description apparently were from the lungs. The patient was born in Wisconsin, was of good intelligence and gave a negative family history. She had had all the usual diseases of childhood. Beginning about May 25th, 1910, she suffered from a severe attack of typhoid fever. Convalescence was well established by August 1st. Following this she complained of pain in the abdomen and on Sept. 4th was taken sick with acute pain in the right hypochrondrium, nausea, and vomiting. She noticed that she was jaundiced on the second day of the attack, which lasted five days. A second attack occurred on October 7th. She entered the Milwaukee County Hospital on October 12th, but during her stay of nine days in the hospital, she showed no clinical symptoms aside from slight pain in the back. The examination of the heart and lungs was negative.

---

*Williamson. Trans. London Obstetrical Society, 1900, XLI. 303-338.

Menstruation began at the age of fifteen years, was of the twenty-eight day type and usually lasted three days. She had always suffered moderate pain at the time of the periods but the flow had never been excessive. She gave no history of venereal disease and her habits had always been good. During her six years of married life she had had three children. The first child was born in 1906, was nursed at the breast, and is in excellent health at present. The second child was born in 1908, but died on the second day of hemorrhage from the cord. The third child was born in 1909, was nursed at the breast, and has always been in good health. The patient says she has never had any miscarriages. Since leaving the hospital in October 1909, she had been well until January 14th, 1911, when she began to flow, this being about the usual time for her usual menstrual period. Previous to this time, her periods had been regular and none had been missed except during pregnancy and lactation. From this time on she had a constant moderate uterine hemorrhage. Since February 16th it had been more profuse. During the time of the flow, she had sharp pains in her pelvis. On February 1st she noticed that her breasts were enlarging as well as her abdomen. She had headaches practically every alternate day. She consulted two physicians who told her she was pregnant.

On March 1st, as stated, patient suffered from two hemorrhages, the quantity of each being estimated at about twelve ounces. In the afternoon of the same day she had a chill which lasted half an hour. She also complained of very severe pain through her chest during each of these attacks, which lasted about an hour. She gave no previous history of cough, night sweats, expectoration, nor loss of weight. On the following day she entered the hospital.

The physical examination showed a fairly well nourished, well developed woman of medium stature. Her color was good. The patient stated that she was paler than usual. The heart and lungs were negative. The abdomen was enlarged and bulged in the lower portion, a little more marked on the right side. Tenderness was elicited in both flanks. A mass, evidently the uterus, was outlined, quite firm, symmetrical, extending up to the umbilicus in the midline. No fetal heart sounds were heard. A bloody vaginal discharge was present. A provisional diagnosis of threatened abortion was made. The patient was placed in bed and absolute quiet enjoined. No sedatives were given. On March 3rd, she had a chill and the bloody vaginal discharge continued. Dr. Kreutzer saw the patient on March 4th and gave as his opinion that the fetus was dead and advised abso-

lute quiet and observation for a few days. The patient was comfortable for a few days but the flow continued.

On March 9th, the vagina and cervix were packed at eleven o'clock in the morning. Pains began immediately and continued throughout the afternoon at intervals of one-half hour. At eleven o'clock P. M. the packing was removed. The cervix was very hard and admitted the tip of one finger. No mass could be palpated with the examining finger. Large blood clots were expelled with each pain. Between pains the uterus had a somewhat boggy feeling. The hemorrhage continued throughout the night and at six A. M. on March 10th, five hundred cubic centimeters of blood were discharged. The pulse was of good quality. Very severe pain was complained of, especially on the right side. A number of large clots of very dark blood were expelled. At eight o'clock Dr. Kreutzer saw the patient and advised immediate packing of the vagina. The hemorrhage continued through the packing. One hour later, he expressed manually the contents of the uterus, which consisted of a quart of material to be described later. A curettement was done, a large number of small masses being secured. The uterus was packed with a strip of gauze soaked in 40 per cent alcohol. The patient recovered readily from the anesthetic. One hour later, she had a severe chill lasting ten minutes, her temperature reached 104° F., the pulse rate was 120 per minute. The temperature gradually went down so that it was normal the following day and remained so. The patient was kept in bed for ten days, receiving twice daily hot vaginal douches. On March 20th she was in excellent condition and was allowed out of bed. On March 30th she again complained of a bloody vaginal discharge and pain in the lower abdomen. Pulse and temperature were normal. Patient was kept quiet in bed for three days when the flow ceased. On April 11th she again began to flow. Pulse and temperature were normal. The condition rapidly improved upon being kept in bed and being given ergot. Upon April 18th she insisted upon going home. The general condition was excellent. There was no bleeding from the uterus.

Pathological Report:—The material passed per vaginum consists of several dark red masses, the largest of which measured 10x3x4 cm. They are composed of pale white or pink cyst-like bodies varying from 3 to 12 mm. in diameter, containing a clear fluid. They are attached together so that the gross structure resembles a bunch of grapes. The interstices between the cysts are filled with firm blood clots.

Miscroscopic Structure:—Alcohol fixation, stained with Hematoxylin and Eosin, and Van Gieson stains. The spaces between the

vesicles are occupied by strands of fibrin, polymorphonuclear leucocytes, and erythrocytes. The surface of the vesicles is covered by a thin layer of protoplasm not differentiated into cells, but which contains pale staining vesicular nuclei. In many places this protoplasmic layer is heaped into masses containing a proportionate increase of nuclei. These areas present the appearance of giant cells containing from three or four to several dozen nuclei. Immediately below the protoplasmic layer is a single layer of euboid cells with dark staining nuclei, exactly resembling the Langhans layer of the normal young chorionic villus. Beneath this layer is a structureless mass of tissue, varying in thickness, which is colored very faintly by the Van Gieson stain. The greater portion of the interior of the vesicles is occupied by a slightly granular material stained diffusely with Eosin and not affected by the Van Gieson stain. Discretely distributed through this material are numerous cells which stain very faintly with Hemotoxylin. The outline of these cells varies from that of the circular epithelioid to that of the sprindle shaped fibroblast. No vascular structures and no blood cells are found within the vesicles.

The macroscopic and microscopic findings in this case show that we were dealing with a Hydatidiform Mole. Assuming that the last regular period occurred in December, the pregnancy was probably not more than three months old on March 1st when we first saw the patient. The large size of the uterus (it reached the umbilicus) together with the long history of hemorrhage and the peculiar boggy feeling of the uterus should have pointed toward the correct diagnosis. The giant cells observed on the surface of the vesicles probably correspond to similar structures observed on the young normal chroionic villi, which are usually interperted as a beginning branch which will grow out from the sides of the villi. Considering the frequent causual relationship between Hydatidiform Mole and Deciduoma Malignum and the short period of subsequent observation, the prognosis in this case is very guarded.

We wish to acknowledge our indebtedness to Dr. Kreutzer for his courtesy in permitting us to report this case.

---

# WISCONSIN MEDICAL JOURNAL

OFFICIAL PUBLICATION OF THE STATE MEDICAL SOCIETY OF WISCONSIN.

A. W. MYERS, M. D., Editor.
141 Wisconsin Street, Milwaukee.

J. P. McMAHON, M. D., Managing Editor.
141 Wisconsin Street.



Publication Committee:

A. J. Patek, M. D., Milwaukee. G. E. Seaman, M. D., Milwaukee
O. H. Foerster, M. D., Milwaukee. C. S. Sheldon, M. D., Madison.
S. S. Hall, M. D., Ripon.

Collaborators:

The Council.

M. R. Wilkinson.....Oconomowoc
G. Windesheim.....Kenosha
F. T. Nye.....Beloit
W. Cunningham.....Platteville
J. V. Mears.....Fond du Lac
H. W. Abraham.....Appleton
Edward Evans.....La Crosse
T. J. Redelings.....Marinette
O. T. Hougen.....Grand Rapids
R. U. Cairns.....River Falls
J. M. Dodd.....Ashland
H. E. Dearnolt.....Milwaukee



Annual Subscription. - - - $2.00. Single Copies, - - - - - $0.20

Address all business communications to
WISCONSIN MEDICAL JOURNAL,
504 Goldsmith Building, Milwaukee.

[Entered as second class matter, June 30th, 1903, at the Post Office at Milwaukee, Wis., under Act of Congress, March 3rd, 1879.]

Vol. X. OCTOBER, 1911. No. 5


## EDITORIAL COMMENT.

### FREE ANTI-TYPHOID VACCINE.

One of the progessive steps taken by the Wisconsin State Hygienic Laboratory is recorded among the News Items of this number of the Journal in the announcement that anti-typhoid vaccine will be furnished free of charge to any registered physician who wishes to make use of it.

Prophylactic vaccination has passed the experimental stage as the experiences of our troops recently encamped along the Mexican border amply demonstrate. This subject was considered editorially in the August Journal and so needs no detailed discussion at the present time, but we must pause to heartily congratulate both the Medical Profession of Wisconsin and the Wisconsin State Hygienic Laboratory on the state of affairs which this announcement indicates.

In the past the distance between the laboratory workers and the busy practitioner has been so great, and the methods of communica-

tion so few, in spite of the multiplicity of publications, that the illuminating work of the one was often transmitted to the other only through the somewhat turbid medium of the detail man of a pharmaceutical house. In this way, perhaps, some estrangement has arisen between two branches of the profession, each of which absolutely needs the other.

But a new era is dawning in Wisconsin when the research workers and the practitioner will be brought into closer touch, each helping the other, through the intermediation of the State Hygienic Laboratory. The opportunity offered to secure free anti-typhoid vaccine places at the disposal of every reputable medical man one of the newest and best weapons for use in the war against disease which the laboratory has yet developed.

## PRACTICAL TESTS FOR LICENSE TO PRACTICE.

At the meeting of the State Board of Medical Examiners held at Madison in July of this year a resolution was adopted providing that in all examinations hereafter practical tests will be required in physical diagnosis, chemical and miscroscopic urinalysis, bacteriology, pathology, histology, and practical anatomy.

This is an important step in the right direction and we hope some way may be devised in the not distant future to make the examinations in all branches cover both practical and theoretical aspects of the subjects.

It is obviously impossible to give a practical examination in obstetrics but there certainly should be exacted from each applicant for license to practice medicine the evidence of practical training in this branch which is suggested in the following letter written by Dr. Hirst, Professor of Obstetrics in the University of Pennsylvania, to the secretaries of the various State Examining Boards.

Dear Sir:—

Of all branches of medical practice, it is generally admitted, I think, by those who have investigated the subject, that young physicians are least well prepared in obstetrics and that lack of adequate preparation in this branch is productive of more harm to the community than a deficiency in any other.

The large Maternity hospitals of the country receive every year a number of unfortunate women in childbirth, fatally injured by inadequate or unskillful medical attendance, and the infant is usually destroyed with its mother. These tragedies, therefore, must be comparatively frequent throughout the country.

Our medical schools have recognized of late, their defects in material and clinical equipment for teaching this branch and are earnestly endeavoring to remedy them.

The best schools of the country demand of their students personal attendance on a certain number of confinement cases before graduation, although the number is small compared with the requirements of Europe, where forty to fifty cases are required before a candidate is licensed to practice.

A Committee of the American Gynecological Society last year recommended that at least six cases should be attended, under supervision, by each undergraduate.

In view of these facts, would you kindly submit to your board the inquiry whether the time has not arrived to act in accord with the practice of the older civilized states of the world in demanding of an applicant for a license to practice medicine, evidence of practical training in Obstetrics?

Very respectfully,

BARTON COOKE HIRST, M. D.
*Professor of Obstetrics in the University of Pennsylvania.*

## CORRESPONDENCE.

BELOIT, WIS., October 18, 1911.

*Editor Wisconsin Medical Journal.*

DEAR SIR:—In a circular letter sent out from the "Everett Home" of this city, it would appear that I was financially interested in the instutition. The fact is that we do all the surgical, and the greater part of the obstetrical and medical work of the institution, get paid the regular fees, no more and no less, and have no other financial connection and know nothing of the fees paid for sending cases and derive no financial benefit other than regular fees.

D. R. CONNELL.

---

## NEWS ITEMS AND PERSONALS.

The corner stone of the **Stevens Point Hospital** was laid on Oct. 8th.

**Dr. J. P. Connell,** Oshkosh, spent two weeks in Montana, the Dakotas and Minnesota.

**Dr. R. E. Davies,** Waukesha, was appointed health commissioner of that city, to succeed Dr. W. B. Strong, resigned.

**The Wisconsin College of Physicians and Surgeons** held its opening exercises on October 2nd, for the year 1911-1912.

**Dr. W. B. Strong.** Waukesha, for four years health commissioner of that city, has resigned, and will remove to St. Martens.

**Dr. David Lloyd Williams,** Milwaukee, has been appointed an assistant surgeon at the National Veterans' Home at Danville, Ill.

**Dr. William Reese,** Dodgeville, who recently underwent an operation for appendicitis, has recovered and has resumed his practice.

**Dr. F. J. Antoine,** Prairie du Chien, is making preparations to spend a month in New York and Boston in post-graduate work.

**Dr. H. J. Higgs,** Crivitz, formerly of Wausaukee, has been appointed company surgeon for the Chicago, Milwaukee and St. Paul Railway.

**Dr. W. T. Rinehart,** Ashland, who was operated upon for perforation of the stomach, on October 13th, is said to be in a critical condition.

**Dr. G. V. Mears,** Councilor of the Fifth District, has returned from a vacation trip spent visiting relatives in Pennsylvania and New York.

**Dr. T. L. Harrington,** Milwaukee, has been appointed a delegate to the Sixth Annual International Purity Conference, to be held at Columbus, Ohio, Oct. 23 to 27.

**Dr. Rock Sleyster,** Waupun, is in the east visiting the different prisons and spending a month at Mattewan and Dannemora, New York, studying the criminal insane.

**Kiel, Wis.,** is to have a hospital. A canvass for the sale of $20,000 worth of stock for the hospital is well under way and is said by the promoters of the project to be meeting with liberal support from the public.

**St. Luke's and St. Mary's Hospitals,** Racine received $1,500 on Sept. 9, when tag day was held under the auspices of the Florence Nightingale Society and St. Mary's Aid Society. The money will be used in establishing free beds.

**Dr. A. Van Westrienen,** Racine, met with a serious accident on September 25th. In attempting to repair his automobile while the machinery was in motion, his left hand was caught in the gearing breaking all the fingers and badly lacerating the hand.

A permit has been issued to erect a **Municipal Isolation Hospital at Milwaukee,** at a cost of $65,000. Work on the structure has already been started. The hospital will take care of scarlet fever and diphtheria cases for the present. Accommodations will be provided for 100 patients.

**Margaret Fahnestock Training School** of the New York Post Graduate Medical School and Hospital has completed its new addition which provides accommodation for 139 nurses. The former building accommodated 67, and was inadequate for the needs of the Medical School and Hospital building, now nearing completion.

**The Minneapolis, St. Paul & Sault Ste. Marie Railway Surgical Association** held their fifth annual meeting October 16th and 17th at The Blackstone, Chicago, Illinois. The following officers were elected for the year 1911-1912: President, Dr. Charles A. Stewart, Duluth, Minn.; Vice-President, Dr. H. Jefferson O'Brien, Superior, Wis.; Secretary-Treasurer, Dr. John H. Rishmiller, Minneapolis, Minn. The next annual meeting will be held in August at Duluth.

**Marriages.** Dr. Carl Dickinson, Downing, and Miss Ella Wagner, Hudson, Sept. 11th.

**Marriages.** Dr. E. B. Fuller, Fond du Lac and Miss Mae Hinman, St. Paul, Minn., Oct. 5th.

**Removals.** Dr. Anton B. Jensen, New Holstein to Menasha.

Dr. L. A. Vanderlinde, Wild Rose to Wautoma.

Dr. Bacon, Kenosha to Brooklyn, N. Y.

Dr. Howard Eaton, formerly of Beloit, but more recently of Mexico, is now located at Shopiere.

Dr. B. W. Rogers, Neenah, has disposed of his practice to Dr. T. D. Smith of Rochester, Minn., and will remove to Chicago.

Dr. E. T. Rathert, who for the past twelve years has practiced medicine at Tigerton, has formed a partnership with Dr. C. G. Greengo at Chilton.

Dr. Thomas Jasperson, Neenah, who has been in Texas for some time, has decided to remain there.

**Removals.** Dr. William Donahue, Antigo to Manitowoc.

Dr. C. M. Wahl, Mineral Point to Spring Green.

Dr. A. W. Wolfrum, Antigo to Chicago.

**Deaths.** Dr. James E. Mahoney, Milwaukee, died on September 27th, 1911, aged 45 years. The cause of death was given as heart failure. Dr. Mahoney practiced at Highland before coming to Milwaukee.

Dr. James Burke, Gillette, died on October 12, at his home in Wayside, from the effects of spinal disease. He was 56 years of age.

Dr. Burke was born in 1855 at Wayside. He attended the Oshkosh Normal and graduated from Rush Medical College in 1887. He was a member of the Oconto County and State Medical Societies.

## VACCINATION AGAINST TYPHOID FEVER.

The toll which typhoid fever exacts from the world yearly is a very heavy one. The actual number of deaths is large and those ill from the disease is about ten times the death rate. The disease has often times played havoc with the armies in the field, as for example, with the English troops in the Boer war and our own troops in the Spanish American War. Just prior to the Boer war Sir Almroth Wright introduced a method of vaccination against the disease. This has undergone a thorough trial and we are in a position now to speak of it with a certain degree of assurance. In March, 1909, acting on the advice of a Commission, the method was introduced into the United States army. It was not, however, made compulsory. The report of the Surgeon General of the Army for 1910 gives some remarkably interesting figures. It shows that up to the present time some 17,000 officers and men have taken advantage of the procedure voluntarily. The report shows that the cases of typhoid fever among those soldiers not vaccinated has been sixteen times as great as among the vaccinated. Up to October first, 1910, only five cases had occurred in vaccinated men and these five cases were so mild that the diagnosis was doubtful. On the other hand 418 cases had occurred in the non-vaccinated.

In the Spanish-American War within a period of three and one-half months we had 20,738 cases of typhoid fever with 1580 deaths. During the recent mobilization of the troops in Texas some 18000 men were in camp under war conditions for a period of more than two months. Yet, only one case of typhoid fever has developed, a teamster, who had not been vaccinated.

The results have been so striking that the Secretary of War, acting on the advice of the Surgeon General, has made anti-typhoid vaccination compulsory on all officers and enlisted men under forty-five years of age, and the Public Health and Marine Hospital Service has made it the duty of their officers to vaccinate all applicants entitled to their services.

Recognizing the value of the procedure, the Wisconsin State Hygienic Laboratory proposes to furnish free to physicians of the State anti-typhoid

vaccine. Full directions will accompany the material and the only conditions made are that the request must come from registered physicians in the State and that these physicians will agree to make a report of their results to the laboratory. It is recommended that where one case of typhoid fever occurs in a family, other members of the family shall be vaccinated. The laboratory would be pleased to receive letters from physicians throughout the State expressing their opinion of this movement and offering suggestions as to carrying it out. The vaccine will be ready for distribution by December first. Address all correspondence Wisconsin State Hygienic Laboratory, Madison, Wisconsin.

The Governors of the **New York Skin and Cancer Hospital** announce that Dr. L. Duncan Bulkley will give a thirteenth series of Clinical Lectures on Diseases of the Skin in the Out-Patient Hall of the hospital, on Wednesday afternoons, from November 1st to December 20th, 1911, at 4:15 o'clock.

The course will be free to the medical profession.

CHARLES C. MARSHALL, *Chairman of Executive Committee.*

## CORN-SHREDDER GUARDS.

On account of the fact that the accident cases referred to in the following paragraph are usually of a severe character and require prompt medical attendance it seems well to publish in full the accompanying announcement of the Industrial Commission of Wisconsin in order that the physicians seeing these cases may be informed as to the legal aspect of the matter.

Madison, Wis., Oct. 15—Efforts are being made by the Industrial Commission of Wisconsin to cut down the appalling number of farm accidents caused by corn shredding and husking machines. The commission is charged by law with the duty of enforcing the statute, which requires that all shredders and huskers shall be guarded. Guards for these machines are simple and inexpensive and the commission is advising farmers as to the proper method of building them.

The hazard to life and limb, which has become greater each year with the increasing use of shredders, is becoming a serious problem. Don D. Lescohier of Minnesota, in a recent issue of the Survey, has this to say on the subject:

"Sixteen fatal accidents, two more likely to result in death, eighty-five serious injuries, and thirty-two severe ones—a total of 135 accidents—were reported from Minnesota's agriculture during the past twenty months, eighty-two of them, including four fatalities, in the last eight months. Forty-one per cent of the accidents occurred on corn shredders, which are the most dangerous agricultural machines in use in the northwest."

The Wisconsin legislature in 1911 passed a law placing a heavy penalty upon owners of unguarded corn shredders. These owners not only may be fined, but in addition they are denied the defense of contributory negligence in case of a lawsuit growing out of an injury to an employee. This means that, no matter if the injured person was careless he can get damages from his employer for injury.

Under the law it is the duty of every person using corn shredding or husking machines to equip the machine with safety or automatic feeding devices for protection from accident by the snapping rollers, husking rollers and shredding knives.

This duty is absolute. It is not enough to exercise "ordinary" care.

It is the duty of the Industrial Commission to enforce this law. The penalty is $25 to $100 for each offense.

The corn shredder law (section 1636—131 to 135) prohibits the sale of shredders which are not fitted with "safety or automatic feeding devices." The law also penalizes any person operating or maintaining an unguarded machine.

Violations of this law are to be punished by fines of from $25 to $100.

## STRIKING INCREASE OF INSANE POPULATION.

In the 1910 Census the enumeration of the insane in asylums indicates a very striking increase in this class of the population. In 1904 the number of insane in institutions was 150,151. In 1910 this number had increased to 184,123, an increase of 22.6 per cent in six years. The number of commitments to insane asylums during the year 1904 was 49,622, and during the year 1910 was 59,628, an increase of 20.2 per cent.

In 1904 the feeble-minded in institutions numbered 14,347; in 1910 the number was 20,199. The number of commitments to institutions for this class increased from 2,599 in 1904 to 3,848 in 1910.

## AMERICAN MEDICAL ASSOCIATION.

### Public Health Education Committee.

### Plan of Work for 1910-1911.

This plan of work is the result of the following resolution unanimously passed by the House of Delegates of the American Medical Association at their annual meeting held in June, 1909, in Atlantic City, N. J.

"Whereas, The American Medical Association, not only as one of its declared purposes, but by numerous lines of activity, many of them connected with the Section on Hygiene and Sanitary Science, stands committed to the education of the public with respect to the nature and prevention of disease, and

"Whereas, The demand for such popular education with respect to tuberculosis, cancer, typhoid fever, and other decimating diseases has become urgent; therefore be it

* * *

"Resolved, that the woman physician members of the American Medical Association be, and they are hereby, requested to take the initiative individually in their respective associations in the organization of educational committees to act through women's clubs, mother's associations and other similar bodies, for the dissemination of accurate information touching these subjects among the people, and that they be requested to submit to the House of Delegates, a yearly report of such work, and elect from among their number a committee to take charge of the same."

In accordance with this resolution, physicians from all over the United States held a meeting in New York City, July 20, 1909, when the Public Health Education Committee of the American Medical Association was formed and officers were elected. Many physicians both men and women, who had

already done a great deal of work individually along these lines promised, through this committee, to lecture gratuitously, from time to time during the ensuing year.

The work was organized and went forward in forty states and on request 2250 lectures were given to audiences, aggregating 102,575 people, who were members of women's clubs, mother's and teachers' organizations, Young Women's Christian Associations, church and social settlement clubs, etc.

This Committee has now been made part of American Medical Association Council on Health and Public Instruction.

The subjects to be presented this year are:

1. The cause and prevention of ordinary colds, bronchitis, etc.
2. The value of pure food and the physiology of digestion.
3. Food, its relation to intellectual and physical development.
4. The relation of clean streets to public health.
5. The water borne disease and the relation of pure water to public health.
6. Hygiene of public conveyances.
7. The value of exercise and rest to public health.
8. Diseases induced by certain industries.
9. The causes and prevention of nervous exhaustion and prostration.
10. The mental hygiene of rest, occupation and emotion.
11. The use and abuse of stimulants and narcotics.
12. The prevention and cure of tuberculosis.
13. The air we breathe and the value of ventilation.
14. Bacteria helpful and harmful.
15. The relation of flies, mosquitoes, water bugs and other insects to public health.
16. Pure milk and infant hygiene.
17. Child hygiene in relation to the home, the school, the play ground and child-labor.
18. The hygienic care and management of nervous children.
19. The importance of medical inspection in our schools.
20. The relation of dental hygiene to good health.
21. Prevention of some of the commoner skin diseases.
22. The importance of early diagnosis and treatment of adenoids.
23. The causes and prevention of deafness.
24. The prevention of Fourth of July injuries and tetanus.
25. Habit postures good and bad.
26. The causes and prevention of blindness.
27. The causes and results of eye-strain.
28. The causes and prevention of rheumatism, gout, appendicitis and Bright's disease.
29. The care of the sick at home.
30. How to meet emergencies, hemorrhage, burns, etc.
31. How to instruct children regarding the origin of life.
32. The responsibility of girlhood to motherhood in the care of the health during the menstrual period.
33. Pregnancy and the menopause.
34. The value of early diagnosis of cancer in women.
35. The responsibility of boyhood to fatherhood.

36. Social Hygiene—how parents may protect their sons and daughters from immorality.

Etc., etc. Other topics which may arise concerning public health.

In order to simplify this work, it is suggested that each club or organization wishing one or more of the above lectures on the Prevention of Disease, arrange the date, choose the topic or topics and communicate with

of the Public Health Education Committee, who will upon receiving such requests ascertain which of the physicians in their own location, who have promised this public service may be able to arrange their engagements to be free to deliver the address or addresses. As the constant demands of private and charity practice leave the physician little time for outside work, it is hoped smaller clubs will have joint meetings in order that this work, designed to lessen suffering and save life, may be as far-reaching as possible.

Throughout the United States such excellent work has been done to assist many of the Boards of Health, and also independently, by public-spirited men and women in work for pure milk, clean streets, prevention of tuberculosis, etc., etc., that we hope to have their hearty co-operation in this wider work for the public good.

CENTRAL COMMITTEE.

R. S. Morton, M. D., Chairman, New York City.
M. A. Asserson, Acting Secretary, New York City.
J. Walter, Treasurer, New York City.
L. H. South, M. D., Kentucky.
S. C. Buckley, M. D., Illinois.
R. T. Bullard, M. D., California.
A. L. Hamilton, M. D., Massachusetts.
M. Holliday, M. D., Texas.
L. L. Liebhardt, M. D. Colorado.

of the Public Health Education Committee.
of the American Medical Association.

## AMERICAN ASSOCIATION FOR STUDY AND PREVENTION OF INFANT MORTALITY.

The annual meeting of the American Association for the Study and Prevention of Infant Mortality is to be held at Chicago, November 16-18, 1911. The work of the Association will be transacted partly in small sections devoted to special work and partly in larger meetings of a popular nature.

There will be reports on infant welfare work in this country and abroad by Professor C. R. Henderson of Chicago, Dr. Hastings H. Hart, Director Department of Child Helping, Russell Sage Foundation, Assistant Surgeon General J. W. Kerr, U. S. Public Health and Marine Hospital Service, and others.

The sections with their chairmen are as follows:

City Milk Supply, Prof. E. A. Jordan. University of Chicago.

Continuation Schools in Home-Making. Dr. Helen C. Putnam, Providence.

Eugenics, Prof. H. E. Jordan. University of Virginia, Charlottesville.

Housing, Mr. Lawrence Veiller, New York.

Midwifery, Dr. Mary Sherwood, Baltimore.

Nurses' Association and Social Workers, Miss M. Adelaide Nutting, Columbia University.

F. S. CHURCHILL, M. D., *Secretary.*
1259 North State St., Chicago.

---

**Ehrlich-Hata 606 in Ophthalmology.** SCHNAUDIGEL, OTTO, Frankfurt a. M., (Archiv für Augenheilkunde, 68, p. 212), reports the clinical histories of 21 cases which he injected with exactly neutral emulsions of arsenobenzol in the gluteal region, with one exception (between the shoulder blades). The results were very good in 4 cases of very severe hereditary parenchymatous keratitis. As frequently experienced with mercurial inunctions, also here the infiltration of the cornea was subsiding. An unusually large papule of the iris disappeared after injection of 0.5 arsenobenzol in 6 days. A luetic tarsitis which had existed for months also healed in a few days. Several cases of optic neuritis, papillitis, and papillo-retinitis, healed also in a relatively short time, one of incipient papillitis was arrested. A palsy of the superior oblique in a case of spinal lues with considerable ataxia recovered in about 6 weeks. The general condition of a man affected with tabes, reflex immobility of the pupils and mydriasis showed remarkable improvement 3 weeks after the injection of 0.5. The results were the more striking the sooner the infiltration following the injection subsided. There was only one failure. S. Considers arsenobenzol as a remedy of enduring value for ophthalmology.

C. Z.

---

**On Eye Diseases After Treatment with Salvarsan.** DAVIDS, H., Münster I. W. (Deutsche Medizinische Wochenschrift, 1911, No. 13, p. 596.) In none of the cases of ocular affections after injection of salvarsan a poisonous action of salvarsan on the eye could be ascertained. Such a possibility must, however, be considered, and exact observations in this direction are desirable. D. gives the clinical history of a woman with healthy eyes who presented, 2 days after an intramuscular injection, a bilateral luetic iritis with an aggravation of the maculo-papulous exanthema (Herxheimer's reaction). Both affections healed speedily. About 3½ weeks later a relapse occurred on the right eye under the aspect of a very grave papulous iritis, which rapidly subsided after an intravenous injection.

According to Ehrlich, the parasites in such cases are not killed, the doses being too small, but irritated and in this condition produce a greater quantity of toxins. This explains that the reaction need not always be harmless, but that important organs may be damaged. If such diseases were directly caused by salvarsan, as assumed by others, the striking favorable effect of the 2nd injection would be entirely inconceivable.

The author summarizes: After salvarsan previously healthy eyes may become seriously affected. With greatest probability these affections are all to be considered as luetic, and develop, because the injection did not act strongly enough.

C. ZIMMERMANN.

# THE STATE MEDICAL SOCIETY OF WISCONSIN

ORGANIZED 1841

## Officers 1911-1912.

J. M. DODD, Ashland, President.

T. J. Redelings, Marinette — 1st Vice-President.

C. A. Armstrong, Boscobe — 2d Vice-President.

H. E. Dearholt, Milwaukee, 3rd Vice-President.

CHAS. S. SHELDON, Madison, Secretary. S. S. HALL, Ripon, Treasurer.

ROCK SLEYSTER, Waupun, Assistant Secretary.

## Councilors.

TERM EXPIRES 1917.

1st Dist., M. R. Wilkinson, - Oconomowoc
2nd Dist., G. Windesheim, - - Kenosha

TERM EXPIRES 1912.

3rd Dist., F. T. Nye, - - Beloit
4th Dist., W. Cunningham, - - Platteville

TERM EXPIRES 1913.

5th Dist., J. V. Mears, - Fond du Lac
6th Dist., H. W. Abraham Appleton

TERM EXPIRES 1914.

7th Dist., Edward Evans, - - La Crosse
8th Dist., T. J. Redelings, - Marinette

TERM EXPIRES 1915.

9th Dist., O. T. Hougen, - - Grand Rapids
10th Dist., R. U. Cairns, - - River Falls

TERM EXPIRES 1916.

11th Dist., J. M. Dodd, - Ashland
12th Dist., H. E. Dearholt, Milwaukee

## Delegates to American Medical Association.

L. F. Bennett, Beloit. C. S. Sheldon, Madison. A. H. Levings, Milwaukee

## Alternates.

F. S. Wiley, Fond du Lac. Wilson Cunningham, Platteville. R. G. Savle, Milwaukee

## Committee on Public Policy and Legislation.

A. W. Gray, Milwaukee, Chairman. J. P. McMahon, Milwaukee. F. F. Bowman, Madison.

## Committee on Medical Defense.

G. E. Seaman, Milwaukee, Chairman. S. S. Hall, Ripon. A. J. Patek, Milwaukee.

## Committee on Prevention of Tuberculosis.

C. A. Harper, Madison. G. E. Seaman, Milwaukee. M. P. Ravenel, Madison.
J. M. Beffel, Milwaukee. C. H. Stoddard, Milwaukee.

## Program Committee.

A. W. Gray, Milwaukee, Chairman.

## NEXT ANNUAL SESSION, WAUSAU, 1912.

The Wisconsin Medical Journal, Official Publication.

## LIST OF EXECUTIVE OFFICERS OF COUNTY MEDICAL SOCIETIES.

| County. | President. | Secretary. |
|---|---|---|
| Ashland-Bayfield-Iron | J. M. Meyers, Odanah | J. M. Dodd, Ashland. |
| Barron-Polk-Washburn-Sawyer-Burnett | H. B. Crommett, Amery | I. G. Babcock, Cumberland. |
| Brown-Kewaunee | R. C. Buchanan, Green Bay | T. J. Oliver, Green Bay. |
| Calumet | F. P. Knauf, Kiel | J. A. Schmidt, Brillion. |
| Chippewa | A. W. Wilmarth, Chippewa Falls | A. L. Beier, Chippewa Falls. |
| Clark | H. H. Christofferson, Colby | E. L. Bradbury, Neillsville. |
| Columbia | B. C. Meacher, Portage | A. J. Batty, Portage. |
| Crawford | A. E. Dillman, Steuben | A. J. McDowell, Soldiers Grove. |
| Dane | G. H. Keenan, Madison | T. W. Tormey, Madison. |
| Dodge | A. E. Bachhuber, Mayville | C. G. Schwalback, Juneau. |
| Door | | |
| Douglas | F. J. Johnson, Iron River | R. K. Lohmiller, Superior. |
| Dunn-Pepin | A. F. Heising, Menomonie | B. J. Steves, Menomonie. |
| Eau Claire | H. A. Fulton, Eau Claire | E. L. Mason, Eau Claire. |

| County. | President. | Secretary |
|---|---|---|
| Fond du Lac | G. T. McDougall, Fond du Lac | F. A. Read, Fond du Lac. |
| Grant | C. R. Pickering, Muscoda | M. B. Glasier, Bloomington. |
| Green | L. A. Moore, Monroe | G. S. Darby, Brodhead. |
| Green Lake-Waushara-Adams | G. E. Baldwin, Green Lake | R. H. Buckland, Green Lake. |
| Iowa | W. S. Lincoln, Dodgeville | W. M. Gratiot, Mineral Point. |
| Jefferson | James Cox, Jefferson | C. R. Feld, Watertown. |
| Juneau | E. H. Townsend, New Lisbon | A. T. Gregory, Elroy. |
| Kenosha | W. M. Farr, Kenosha | J. H. Cleary, Kenosha. |
| La Crosse | C. H. Marquardt, La Crosse | M. W. Dvorak, La Crosse. |
| Lafayette | J. C. Hubenthal, Belmont | Susanne Ortou, Darlington. |
| Langlade | M. J. Donohue, Antigo | J. C. Wright, Antigo. |
| Lincoln | C. C. Walsh, Merrill | Herbert Saylor, Merrill. |
| Manitowoc | J. R. Currens, Two Rivers | A. J. Shimek, Manitowoc. |
| Marathon | L. M. Willard, Wausau | S. M. B. Smith, Wausau. |
| Marinette-Florence | H. F. Schroeder, Marinette | M. D. Bird, Marinette. |
| Milwaukee-Ozaukee | A. J. Patek, Milwaukee | Daniel Hopkinson, Milwaukee. |
| Monroe | C. H. Cremer, Cashton | A. R. Bell, Tomah. |
| Oconto | J. B. Atwood, Oconto | R. C. Faulds, Abrams. |
| Ouelda-Forest-Vilas | J. M. Hogan, Oshkosh | C. A. Richards, Rhinelander. |
| Outagamie | V. F. Marshall, Appleton | J. P. Dohearty, Appleton. |
| Pierce | E. R. Halliday, Ellsworth | S. F. Rudolf, Ellsworth. |
| Portage | J. D. Lindores, Stevens Point | W. F. Cowan, Stevens Point. |
| Price-Taylor | C. E. Nystrum, Medford | G. H. McClure, Westboro. |
| Racine | E. A. Taylor, Racine | Susan Jones, Racine. |
| Richland | P. G. Lasche, Ithaca | A. D. Campbell, Richland Center. |
| Rock | G. W. Fifield, Janesville | E. B. Brown, Beloit. |
| Rusk | G. M. Carnahan, Bruce | W. F. O'Connor, Ladysmith. |
| Sauk | | Roger Cahoon, Baraboo. |
| Shawano | E. Puckner, Wittenberg | J. B. Gordon, Shawano. |
| Sheboygan | Edward Felter, Plymouth | W. F. Zierath, Sheboygan. |
| St. Croix | O. H. Epley, New Richmond | Boyd Williams, Hudson. |
| Trempealeau-Jackson-Buffalo | C. F. Peterson, Independence | H. A. Jegi, Galesville. |
| Vernon | John Schee, Westby | F. E. Morley, Viroqua. |
| Walworth | R. E. Rugh, Lake Geneva | M. V. Dewire, Sharon. |
| Washington | F. P. Leich, Jackson | S. J. Driessel, Barton. |
| Waukesha | J. H. Voge, Oconomowoc | R. E. Davies, Waukesha |
| Waupaca | T. E. Loope, Iola | G. T. Dawley, New London. |
| Winnebago | B. C. Gudden, Oshkosh | W. L. Herner, Winnebago. |
| Wood | J. C. Hayward, Marshfield | J. B. Vedder, Marshfield. |

# SOCIETY PROCEEDINGS.

## FOND DU LAC COUNTY MEDICAL SOCIETY.

Fond du Lac County Medical Society held its regular bi-monthly meeting on September 13th, in the Council Rooms. Dr. Daniel Hopkinson, Milwaukee, read a paper on "The Microscope as an aid to Diagnosis by the General Practitioner."

## MARINETTE-MENOMINEE MEDICAL ASSOCIATION.

The first meeting of the Marinette and Menominee Medical Association since the summer interim when meetings were not held, took place at the office of Dr. Elwood, October 11th. The attendance was fair. But one paper was given. Dr. Hicks spoke on *Surgical Cases*, and this was followed by a general discussion. The next meeting will be held in November at Marinette. A lunch was served after the meeting.

## ROCK COUNTY MEDICAL SOCIETY.

The Rock County Medical Society met at Beloit on September 26. Dr. Emil G. Beek of Chicago delivered an address on "The Use of Bismuth Paste". Thirty-five members of the Society were present. At the close of the meeting a smoker was held.

## SEVENTH DISTRICT MEDICAL SOCIETY.

The annual meeting of the Seventh District Medical Society was held on October 5th, in the Laboratory of the Health Department at La Crosse, twenty-five members being present. The meeting was called to order by the president, Dr. E. H. Townsend, of New Lisbon.

The president, in his address upon the requirements of students entering upon the study of medicine, dwelt upon the possibilities open to graduates who expected to gain a living by the practice of their chosen profession. He spoke at length upon the necessary requirements of students entering the better schools, their longer periods of study as compared to times gone by, and then made comparison between the regular practitioner and the specialist. In his opinion those entering upon the study of medicine should consider well before going to the expense and long years of study now required of medical students, to avoid future disappointments. His address made a good impression and was enjoyed by all present.

We had the pleasure of listening to an address by Prof. Bardeen, Dean of the Medical Faculty of the University of Wisconsin. Dr. Bardeen recalled the methods of treating disease in vogue at various times in the history of the world, beginning with savage tribes, whose methods of curing as well as preventing disease were those of incantation and demonism, through all the various ages down to the present time. He mentioned the hygienic and dietetic methods of the Jews, as preventive and curative measures, the dietetic and physical training of the Greeks, the anatomical and physiological periods dating from the time of Vesalius and his contemporaries, to the present system of our time, which he was pleased to call the etiological period. The aim of the earlier physicians for recognition of their ability in curing disease was to gain the favor of persons in the higher stations of life as well as to obtain remuneration for their services from them only, the practice of our day being more universal, as is exemplified by preventative medicine. These various differences were fully explained and his address was interesting and instructive. A rising vote of thanks was voted him.

Officers elected were: President, J. H. Pflueger, M. D., Holman; Secretary, C. H. Marquardt, M. D., La Crosse. The meeting then adjourned.

A supper was served at the Hotel Stoddard, which ended a pleasant day in the history of the Seventh District Medical Society.

CHARLES H. MARQUARDT, M. D., *Secretary.*

## SUPERIOR CLINICAL CLUB.

The annual banquet of the Superior Clinical Club will take place on November 20th, at the Commercial Club, Superior. Dr. George Saunders is president of the Club and Dr. D. H. G. Hovde is secretary.

## TWIN CITY MEDICAL SOCIETY.

The Twin City Medical Association held a meeting at the office of Dr. J. R. Barnett at Neenah, September 12th. A dinner was served before the meeting at the Hotel Neenah. Dr. C. J. Coombs delivered an address.

## WAUKESHA COUNTY MEDICAL SOCIETY.

The Waukesha County Medical Society met at the Eagle Hotel, Menomonie Falls, on Friday, October 6th, at 3 P. M.

Members present: Drs. R. W. Hoyt, Campbell, and Burkhart, Menomonie Falls, and Drs. J. B. Noble, B. M. Caples, A. J. Hodgson, E. W. Malone, G. E. Peterson, J. P. Ward, and Sara Elliott, Waukesha. Meeting called to order by the vice-president, Dr. J. B. Noble.

Dr. A. J. Hodgson gave an interesting report of a case of *Acute Bright's Disease*, also a short talk on *Diabetes*. Dr. B. M. Caples gave a report of the A. M. A. meeting at Los Angeles and his sojourn in the Pacific Coast states. Dr. Hoyt, state senator, gave a short talk on *Medical Legislation* at Madison the past year.

After adjournment a banquet was served and a vote of thanks tendered to the Menomonie Falls physicians as hosts of the day.

R. E. Davis, M. D., *Secretary.*

---

**On Barlow's Disease with Special Reference to Ocular Symptoms.** Steindorff, Kurt, Berlin, (Zeitschrift für Augenheilkunde, 25, February, 1911, p. 180), emphasizes the scantiness of ophthalmological literature on Barlow's disease, (infantile scurvy). It is characterized by hemorrhages between periosteum and bone, especially the epiphyses. If it occurs at the roof of the orbit, it produces exophthalmus with hemorrhagic suffusion of the lids by gravitation of the subperiosteal hemorrhages. Hirschberg observed retinal hemorrhages, and Katz hyphema. It occurs in infants who are brought up on artificial food, especially if this is heated too intensely or too long. Under rational nutrition it generally heals rapidly.

S. reports a case of a girl, aged 7 months, who had for 3 days a bluish red swelling of the left upper lid which increased in the next few days. There was also a slight hemorrhage in the conjunctiva of the left eye and several hemorrhages of the gums. Attempts to press the eyeballs towards the orbits were very painful. The peculiar features of this case were that the affection was limited to the orbital bones and the lower jaw and that the child had rickets, which is unusual in this disease. C. Z.

**Changes of the Eye Ground in Hereditary Syphilis.** Japha, A., (From the polyclinic of Prof. H. Neumann for the diseases of children, Berlin. Deutsche Medizinische Wochenschrift, 1911, No. 12, p. 543), emphasizes the importance of the examination of the eyes for the diagnosis and therapy of congenital syphilis. Changes of the fundus are found in about 66 per cent of infants affected with congenital syphilis. According to the classical description of Hirschberg, they consist at first in a haziness of the disc and the surrounding retina. Very soon light dots appear on the whole fundus which, in the course of time, increase in number and size and finally gain fine pigment spots. The center of the retina shows early a grey coloration, which later on may decrease. The periphery is paved with light variegated or dark foci. The disease is always bilateral, but frequently of different degree. These alterations may, besides Wassermann's reaction, be the only objective signs of the disease in some cases and help to a diagnosis in etiologically doubtful nervous disturbances (convulsions, unexplained restlessness of which an illustrative case is reported). C. Zimmermann.

## THE ASSOCIATION OF
## COUNTY SECRETARIES AND STATE OFFICERS
## OF THE STATE MEDICAL SOCIETY OF WISCONSIN.

W. F. ZIERATH, M. D., Sheboygan
President.

M. V. DEWIRE, M. D., Sharon
Vice-President.

ROCK SLEYSTER, M. D. Waupun, Secretary.

NEXT ANNUAL SESSION, WAUSAU, 1912.

**Under this heading will be published each month, papers, editorials, sermons, reports of meetings and all that relates to the County Medical Societies of the state. To it all are invited and asked to contribute, especially the County Secretary. It is yours—make good use of it, and may it be of help to every County Society. It will be edited by Rock Sleyster of Waupun, secretary of the new association, to whom all communications for this department, reports of meetings and news matter should be addressed.**

# WHAT TO STRIVE FOR.*

BY EDWARD EVANS, M. D.,

LA CROSSE, WIS.

*County Secretaries of the State Medical Society of Wisconsin.*

GENTLEMEN: Above my office desk is a brass plate. It carries a picture of a high board fence; on one side, a tramp peering over and grinning pleasantly at a bull-dog on the ground below. It bears this legend:

'Tis easy enough to be pleasant
When life goes by with a song,
But the man worth while
Is the man who will smile
When everything goes dead wrong.

Some such sentiment as this must guide the efforts of every successful County Secretary. You must have the *sang froid* and the goodfellowship of the Knight of the Road, coupled with the tenacity of purpose, the stick-at-iveness of the bull-dog.

The County Society is the unit and center of the State and National organization; but the County Secretary is the heart, the pulsing motor of the County Society.

*Read at the 2nd Annual Meeting of the Association of County Secretaries and State Officers, Waukesha, June 6, 1911.

I take off my hat to the efficient County Secretary. From observation and experience I know much of his trials and a little of his triumphs.

In greater or less degree every one of his refractory flock is vaccinated with one or more of the seven deadly sins: pride, covetousness, luxury, anger, gluttony, envy, sloth. I need not enumerate how those sins distress the good secretary; but what a thorn in the side of goodfellowship and ethical conduct is the covetous doctor, who wants not only what he earns himself but also wants a share of what he is incompetent to earn; as is his partner in sin the gluttonous doctor who greedily absorbs the aforesaid covetous one's surgery at 40 per cent. How anger and envy corrode the strength and lessen the usefulness of the society, I need not tell *you*. But do you not agree that the slothful member gives us most trouble of all?

How to inoculate our professional brethren (in and out of the County Society), with the opposite virtues: humanity, liberality, chasity (of professional conduct), meekness, temperance (in speaking of other doctor's mistakes), brotherly love, and diligence, is a task worthy of a Pasteur or an Ehrlich. I know each of you is ever looking for a remedy in the laboratory of your own good-natured enthusiams, and I hope some one of you will find it.

If you are a good secretary, strive to do your work in spite of all apparent discouragement. If you are a poor or indifferent one, if your heart is not in your work, resign and help get the right man in your place. Every county *has* a *right* man. We need organization *in* our profession today,—more even than organization *of* the profession.

While medical men are notoriously hard units to unite; yet they need, as no other body needs, the benefits of co-operation; for even in the large city we lead lives of isolation and great loneliness. Sometimes we see little of our colleagues for long periods, and what is worse, sometimes desire to see less of them than we do. The *best* of us may react normally against such isolation and be able to balance much drudgery and more discouragement, with much affection and more gratitude, in our daily rounds; but the average practitioner must associate in a fraternal way and in scientific discussions with his fellows, if he would maintain in their proper proportion and relation the social, the scientific, and the business sides of our calling.

In our County Societies we must preserve, in their proper relations the social, the scientific and the business sides of our profession.

Personally, I feel very little time should be given to the business side. I have observed that the doctor who devotes much thought to this, is usually an indifferent doctor, and a not over-successful busi-

ness man; while the one who assiduously pursues scientific medicine unconsciously succeeds financially.

Because of our special qualifications, we are bound to promote and assist all movements for general welfare in our community; therefore I think the County Societies should often hold open meetings. But I feel most attention should be paid to the scientific side of medicine,—to new theories rather than to old practices. I am afraid of the so-called practical man, who, in the phrase of Disraeli, "practices the blunders of his ancestors."

Strive to keep up circulation in the "grey cortex" of the County Society, active enough to counteract the benumbing influence of rountine.

Strive to make effective, evident and fruitful the Golden Rule and "our loans to the Lord", which the lowliest doctor is ever ungrudgingly giving to the sick and needy will be a "sweet yoke" and "burden light".

Then when our work is over and we have crossed the ford, let us hope that our burdens, like those of St. Christopher, will be changed into the presence of "the Radiant Child".

---

## BOOK REVIEWS.

**Progressive Medicine.** A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by HOBART AMORY HARE, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, 355 pages, with 18 engravings. Per annum, in four paper-bound volumes, containing over 1,200 pages, $6.00, net; in cloth, $9.00, net. Lea & Febiger, publishers, Philadelphia and New York.

Vol. I, March 1911. Surgery of the Head, Neck and Thorax, by Charles H. Frazier, M. D.; Infectious Diseases, including Acute Rheumatism, Croupous Pneumonia and Influenza, by John Ruhrah, M. D.; Diseases of Children, by Floyd M. Crandall, M. D.; Rhinology and Laryngology, by. D. Braden Kyle, M. D.; Otology, by Arthur B. Duel, M. D.

Vol. II, June 1911, Hernia, by William B. Coley, M. D.; Surgery of the Abdomen, Exclusive of Hernia, by Arpad G. Gerster, M. D.; Gynecology, by John G. Clark, M. D.; Diseases of the Blood, Diathetic and Metabolic Disease, Diseases of the Thyroid Gland, Nutrition, and the Lymphatic System, by Alfred Stengel, M. D.; Ophthalmology, by Edward Jackson, M. D.

Vol. III, September 1911, Diseases of the Thorax and its Viscera, including the Heart, Lungs, and Blood Vessels, by William Ewart, M. D., F. R. C. P.; Dermatology and Syphilis, by William S. Gottheil, M. D.; Obtetrics, by Edward P. Davis, M. D.; Diseases of the Nervous System, by William G. Spiller, M. D.

The great value of this publication is that it gives much more than an abstract of the work done in these departments of medicine during the current year; it presents an appraisal by a competent authority of the year's progress and so economizes the reader's time by presenting for his consideration only what is important, supplemented throughout by judicious editorial comment.

Progressive Medicine is the best sort of a perennial post-graduate course and we hope the number of its readers may steadily increase.

---

**Hieronymus Fracastor's Syphilis.** From the original Latin. A translation in prose. The Philmar Co., St. Louis, Mo., publishers.

This poem of Fracastor's, originally published in 1530 under the title "Syphilis sive Morbus Gallicus", is a classic in medical literature. It is filled with mythical allusions and quaint ideas which were prevalent at the time it was written, but it also contains much in the way of descriptions of symptoms and treatment that is surprisingly accurate when we consider the period at which it was written. It is to this poem that we owe the name of the disease.

Heretofore this poem has been a mere name to most of us who are unable to read it in the original Latin. The publishers are to be congratulated on bringing it out in a form that all may read. R. G. W.

---

**A Manual of Nursing.** By MARGARET FRANCES DONAHOE, formerly superintendent of nurses and principal of Training School, Philadephia General Hospital. Illustrated. D. Appleton & Co., New York and London, publishers, 1910.

Miss Donahoe has certainly given us a "thorough working text-book" differing slightly from other text-books in essentials. It would be a good book in a training school and helpful to any graduate nurse. The attitude of the nurse toward her patient, the high standard set for the profession, and the helpful suggestions in each chapter leads one to know the author has written from an intimate, personal knowledge of her subject.

S. S. M.

---

**Nostrums and Quackery.** Based on articles on the Nostrum Evil and Quackery in THE JOURNAL of the American Medical Association, with additions and elaborations. Part I, Quackery. Part II, Nostrums. Part III, Miscellaneous. First Edition. Cloth. Price, $1; with individual's name on cover, 25 cents extra. Pp. 509, with 220 illustrations. Chicago: American Medical Association, 535 Dearborn Avenue.

Every physician who patients ask for information regarding the efficacy of certain "patent medicines," advertising specialists or other quack treatments, and every layman who desires information on the same subject, will find "Nostrums and Quackery" an invaluable volume. This means that practically all the medical men and a large proportion of the public have use for a book of this kind. In the last few years THE JOURNAL of the American Medical Association has published a number of articles dealing with the "patent

medicine" evil and quackery. The book "Nostrums and Quackery" contains all such articles, elaborated in many cases and embellished with numerous illustrations, while in addition it contains some matter never before published.

The articles in the book do not deal with generalities. They are specific and to the point; they call a spade a spade. The investigations have been made with a thoroughness that leaves the reader in no doubt as to the fraudulence of the quacks' claims or the worthlessness of many "patent medicines." Furthermore, the statements are authoritative, for it is evident that the Association could not afford to speak as plainly as it does if it were not absolutely sure of the facts. In many instances chemical analyses, made in the Association laboratory, are given.

The book consists of three parts, Part I devoted to quackery, Part II to nostrums, and Part III to miscellaneous subjects. These parts are again divided. Under Quackery, for example, we find sections devoted to "Advertising Specialists," "Cancer Cures," "Consumption Cures," "'Female Weakness' Cures," "Medical Institutes," and other concerns of a similar nature. Under Nostrums there are sections devoted to "Asthma Cures," "Cough Medicines," "Hair Dyes," "Laxatives," "Obesity Cures," "Rheumatism Cures," and other typical nostrum groups. In the Miscellaneous section there are discussed such subjects as "The American College of Mechano-Therapy," "Patent Medicine Makers and the Press," "Molding Opinion in Food Preservatives," and others of equal interest and importance. In fact, the book is not only a *vade mecum* on the nostrum evil but a veritable "Who's Who" in quackdom.

"Nostrums and Quackery" is published primarily to enlighten the public regarding fakes and fakers. It is a duty of every physician to see that his patients become familiar with the contents of this book. The Association is prepared to furnish it in quantities at a very low figure; it also supplies a copy intended for use in the reception room, with the physician's name printed thereon.

---

**A Manual of Pathology and Morbid Anatomy.** By T. Henry Green, M. D., F. R. C. P., Consulting Physician to the Charing-Cross Hospital, etc., London. Revised and enlarged by W. Cecil Bosanquet, M. A., M. D., F. R. C. P., Assistant Physician to the Charing-Cross Hospital, etc., London. Large 12mo, 642 pages, with 250 illustrations. Cloth, $4.50, net. Lea & Febiger, Publishers, Philadelphia and New York, 1911.

This deservedly popular manual has been completely revised by Dr. Bosanquet. Much new matter has, of necessity, been added since the last edition six years ago. Among the most important new material are chapters on Parasites, Affections of the Skin and Joints.

Too much should not be expected of such a book. It is essentially an abstract of the subject of Pathology. One will not find complete discussions of any subject but brief, well arranged paragraphs cover the various disputed points, the pros and cons being given equal space. It is thus a safe, sane book to place in the hands of a student.

The illustrations are rather sketchy, but, on the whole, are adequate. The text reads easily and smoothly in spite of the brevity of the descriptions. An excellent index enables the reader to find, in a brief search, what he is after.

The binding is attractive, the type is clear, very few typographical errors

are seen, and the paper is unglazed so that the light is not reflected to the eyes as from the glazed paper. This Manual is one of the best of its kind and can be recommended to those who wish much meat in small space.

L. M. W.

---

## ABSTRACTS.

---

**Salvarsan in Affections of the Fundus of the Eye.** FALTA, MARCEL, Szeged. (Deutsche Medizinische Wochenschrift, 1911, No. 15, p. 699.) F.'s experiences with salvarsan in diseases of the fundas were not satisfactory. A case of neuro-retinitis and one of neuro-chorio-retinitis are reported in which salvarsan had no effect. Both were cured with Hg. and iodin. From this experience F. considers it not advisable to treat such cases with salvarsan. He things that salvarsan is not indifferent from the diseased optic nerve on which it probably exerts a detrimental influence. He therefore contends: If the optic nerve is diseased, salvarsan must not be used. In syphilitic affections of the hyaloid, retina and chorioid mercury and iodin are preferable and, if not successful, salvarsan may be tried. Before any application of salvarsan an exact examination of the eyes is desirable.

C. ZIMMERMANN.

---

**To the Etiology of Retrobulbar Neuritis.** BUTOIT, A. Lausanne. (Archiv für Augenheilkunde, 68, p. 331.) Rhinogenous retrobulbar neuritis is generally caused by periostitis or phlegmon of the orbit, secondary to a chronic or acute emphyema of the accessory sinuses of the nose. Not in all cases the contents of the orbit need be involved, but the optic nerve, at any place of its course, may be directly affected by a disease of the bone in its immediate neighborhood. In other cases not an accumulation of pus in the nasal sinuses but disturbances of circulation, stasis and increased pressure of inflammatory character, may suffice to severely damage the optic nerve. This is solely a distant action of a process near the optic nerve, which is better termed an osteogenous process. The rhinogenous origin will be the most frequent but the teeth may also through the antrum and the orbit come in relation to the retrobulbar portion of the optic nerve. The ophthalmic vein is occasionally connected by the pterygoid plexus with the alveolar plexus. Thus an odontogenous process may through propagation of disturbances of circulation to the central retinal vein exert an injurious influence on the nutrition of the optic fibers with subsequent severe functional lesions, especially of the very sensitive papillo-macular bundle. Such cases give a peculiar clinical aspect: collateral edema of the orbit and central scotoma. D. reports 2 cases, illustrating this kind of retrobulbar neuritis. The first is an auto observation: An acute alveolar periostitis of the right upper maxilla with symptoms of congestion and collateral edema of the right supramaxillary sinus and orbit, neuralgia of the 1st and 2nd branches of the 5th nerve and central scotoma of right eye. As there were no symptoms of exudation in the antrum nor the orbit it could be only a distant action through venous congestion indicated by hyperemia of the mucous membrane of the lower turbinated body and com-

pression of the optic nerve, with consecutive collateral edema of the skin of the right upper lid. The compression of the optic nerve most likely occurred in the orbit where the anastomosis between ophthalmic vein and pterygoid plexus leaves the orbit through a hole in its floor. As the central vein branches off in the immediate neighborhood, a continuation of the venous congestion into the optic nerve may safely be assumed. The affection healed completely with restitution of normal vision after extraction of the right 2nd premolar tooth and scarifications of the gums. The 2nd case, a woman, aged 38, who for 2 months had suffered from facial neuralgia, noticed an impairment of vision for the last 2 weeks. The borders of the discs were ill defined, prominent at the nasal side, the discs and retinae hyperemic, veins enlarged and tortuous. There was an absolute scotoma for white and colors in both eyes. D., mindful of his own case, consulted a dentist who ascertained, that all 4 wisdom teeth were prevented from breaking through, and an intense swelling of the alveoli and the gums. After extraction of the teeth the alveoli showed an abundant granulation tissue, which had partly perforated their walls. Complete recovery occurred within about 6 weeks.

C. ZIMMERMANN.

---

# THE WISCONSIN MEDICAL JOURNAL

OCTOBER, 1911.

## ORIGINAL ARTICLES.

## THE VENOUS PULSE AND THE HEART SOUNDS.*

J. A. E. EYSTER, M. D.,

PROFESSOR OF PHYSIOLOGY, UNIVERSITY OF WISCONSIN,

MADISON.

The purpose of this paper is to present a brief review of certain recent contributions to our knowledge of the normal venous pulse and of the heart sounds, particularly in reference to the relations that exist between one of the more recently described features of the venous pulse and the third heart sound.

### THE NORMAL VENOUS PULSE.

The pulse present in the larger veins near the heart is now recognized by practically all authors to present, under normal conditions, at least four positive and two negative waves during each cardiac cycle, including under the latter term the beat of the heart and the succeeding pause. In hearts beating more rapidly than the average, only three positive waves are as a rule present. The scope of this paper will permit no more than a brief statement of these and of the significance which is attributed to them by the majority of investigators at the present time. Reference may be made to the writings of Mackenzie[1], Bard[2 3], Hirschfelder[4], Fredericq[5 6], Wenckebach[7],

*Read at the 65th Annual Meeting of the State Medical Society of Wisconsin, Waukesha, June 7, 1911.

†The literature concerning the venous pulse in normal and pathologcial conditions is very extensive and the references given refer mainly to writings in which attempts are made to give more or less complete reviews of the subject. References to other papers may be found in these.

Rihl[11], and Lewis[8] for those who would wish to follow the extremely interesting development of our present knowledge concerning the normal venous pulse and the different views that have been held in regard to the interpretation of its various features†. Our present conception developed largely as a result of the experimental work on animals by Porter[9], Fredericq[5], Hering[10 11], Morrow[12] and others, may be described as follows:

### 1. THE AURICULAR WAVE (*a*).

This wave, which immediately precedes the onset of ventricular systole, is referred by all authors to contraction of the auricle. This is the only wave on the venous pulse which results directly from auricular contraction, all the other venous pulse waves are conditioned by the contraction of the ventricle. This fact was demonstrated by Fredericq[5] and by Hering[13] in animals; the former produced abolition of the beat of the auricle by faradization, the latter produced the same result by vagus stimulation. Under those circumstances the auricular wave was the only one that disappeared. There is no question that the wave results from auricular systole, but in what manner the contraction of the auricle produces the wave has been the subject of considerable controversy. It is possible that there is an actual regurgitation of blood from the auricle into the veins as a result of the contraction of the former (Rihl[64], Hering[10]), or there may be no regurgitation but simply a stasis of the blood flow into the auricle and hence an accumulation of blood in the vein and distension (Wenckebach[7]). The exact interpretation of the cause of the auricular wave would seem to depend on the question whether or not the openings of the venae cavae into the auricles are closed during systole of the latter. It is probable that if the closure occurs it is only partial and probably considerable regurgitation of blood occurs when the auricle contracts.

The beginning of the auricular wave on the venous pulse represents the beginning of the passage of the cardiac impulse along the auriculo-ventricular bundle on its way to the ventricle, and the time interval from this point to the foot of the next wave (which is known to be due to contraction of the ventricle and to begin simultaneously with this contraction) is an important measure of the rate of conduction along the bundle, impairment of which leads to the production of certain pulse arrhythmias or to partial or complete auriculo-ventricular heart block (Stokes-Adams disease, Erlanger[15], Krumbhaar[16], Riebold[17].)

2. THE FIRST VENTRICULAR WAVE (*c* or *s*).

A positive wave beginning at the foot of the descending limb of the auricular wave and shown by Fredericq[5] and others to be coincident in its beginning, when recorded from the auricle, or when recorded from the vein and correction is made for transmission, with the onset of ventricular systole. When the venous pulse is recorded from the usual place in the neck, the onset of the first ventricular wave is usually coincident with the primary rise or main elevation of the arterial pulse as recorded from the carotid artery. This is due to the fact, that while the carotid pulse is obtained in most tracings at a point on the artery somewhat further from the heart than the place from which the venous pulse is obtained from the internal

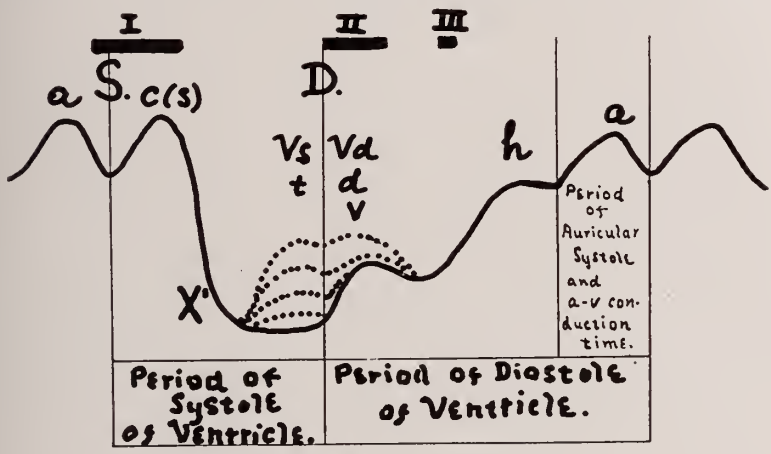



FIG. I. NORMAL VENOUS PULSE.

The line S indicates the beginning of the contraction of the ventricle. The beginning of the c (or s) wave on the venous pulse corresponds to this time only when the venous pulse is taken from or referred to the auricle. If recorded from the usual place in the neck, correction has to be made for the time required for transmission of the waves from the auricle, where they arise, to the neck.

The portion of the venous pulse curve that shows the greatest variation in different cases lies in late systole and early diastole. The various types that may occur are represented by dotted lines, and will be clear on reference to the text. The position of first, second and third heart sounds are also shown.

jugular vein, the transmission of waves in the artery occurs a little more rapidly than in the vein. The important point is that this venous pulse wave, when taken from or referred to the auricle, begins at the instant of onset of ventricular systole. This result was derived

from animal experiments in which a sound was passed into the auricle and the auricular or venous pulse registered at the same time with the changes in ventricular pressure recorded by a sound passed down the carotid artery into the ventricle. The usual coincidence of this venous wave with the primary elevation of the carotid pulse when both are recorded from the neck, before the fact stated above in regard to its relation with the onset of systole of the ventricle was known, led to the view held by a number of clinicians, especially Mackenzie[1], Wenckeback[7], and Friedrich[18], that the wave was not a feature of the venous pulse at all, but was simply the pulsation of the artery transmitted to the vein. For this reason the wave was designated by Mackenzie by the letter *c*, indicating that it was of carotid origin. The experimental work on animals of Fredericq[5], Morrow[2], Cushny and Grosh[19], Rihl[20] and Delchef[21], combined with the clinical observation of Bard[2], that a coincidence of this wave and the carotid pulse when both were recorded from the neck was by no means always present, has served to prove, beyond doubt, that while transmitted arterial pulsation may play a part in the production of this wave and may modify it to a greater or less extent with the usual methods of recording, that independently of any such transmitted pulsation there is a change in the flow of blood in the veins at this time which will cause the development of a wave in these vessels. The usual explanation of the mechanism by which this change of flow comes about is that proposed by Fredericq[5], namely a bulging or projection into the auricle of the auriculo-ventricular (tricuspid) valves at the beginning of systole as a result of the sudden rise in tension of the blood in the rapidly contracting ventricle. That such a projection actually occurs is indicated probably from the much earlier observations of Chauveau and Faivre[22]. The closure of these valves with the onset of ventricular contraction not only stops quite suddenly all inflow into the ventricle from the auricle, but the projection into the auricle may be sufficient to set up an actual regurgitant wave. The summit of this wave on the venous pulse is reached within the first half of systole, or in other words a considerable period of time before the ventricle ceases to discharge blood into the aorta, and the curve then passes rapidly downward to reach the lowest point attained in the whole cardiac cycle.

### 3. THE FIRST NEGATIVE WAVE ($x$).

The negative depression immediately following the first ventricular wave is evidently not a simple decline of this wave or cessation of the factors which produce it, since it reaches a lower point than

any other part of the curve. There must be some factor causing at this time an energetic onflow of blood in the veins toward the heart, tending to partially deplete them of blood and therefore to lower the pressure within them. The occurrence usually accepted as representing at least the most important factor in the causation of this negative phase, has been most clearly stated by Fredericq[5]. Fredericq explains the rapid onflow of blood in the veins at this time to be due to a ballistic recoil of the ventricle from a discharge of its contents into the aorta and the simultaneous retraction of the auriculo-ventricular border in the direction of the cardiac apex. Experiments by Haycraft[23] and others, in which needles were thrust through the chest into the heart and the movements of these recorded, show that such a movement downward of the base of the heart occurs during systole. This movement of the base tends to increase the size of the auricular chambers by pulling on their attachment to the auriculo-ventricular groove and to produce therefore a very low pressure within them. The volume curve of the auricle shows that it is at this time that the most rapid filling of the auricle occurs[24]. This phase of the venous pulse is well characterized by the German authors as the "systolic vacuum" and attracted much attention even from the earlier writers because the fall of pressure is sufficient in most cases to produce a visible collapse of the veins in the neck. Finally, it has been suggested that the expulsion of blood from the ventricle into the extra-thoracic vessels may lower the intra-thoracic pressure and thus assist in the rapid flow of blood into the thoracic cavity from the veins. This can only be considered as a partial factor, for the negative phase is present with wide open thorax (Fredericq[5], François Frank[27]).

### 4. THE SECOND POSITIVE VENTRICULAR WAVE (*v* or *t* and *d*, or *Vs* and *Vd*).

Following the negative phase, the venous pulse curve may rise quite suddenly to form at once a well marked positive wave (*t* wave of Bard[2]), or more frequently the rise is small or gradual and a well marked wave does not occur for an interval of 0.1 of a second or more following the lowest point reached in the negative phase. At this point, shortly before, coincident with, or a few hundredths of a second after the closure of the semilunar valves and the cessation of discharge of blood from the heart, a definite third positive wave occurs (*v* wave.) The interpretation of this wave has been the subject of much controversy, and even today there is marked lack of agreement, not only as to its cause, but also as to the time of its occurrence.

According to some authors it begins in systole, according to others it is to be regarded as entirely a diastolic event. Observations by the writer, in which the heart sounds and the venous pulse in man were simultaneously recorded[25], shows that while the usual statement that places the beginning of this wave with the beginning of diastole as recorded by the closure of the semilunar valves and the second heart sound usually holds, that the *v* wave is very variable in position, in fact the most variable of any of the venous pulse waves. In different individuals it may begin as early as 0.15 second before or .04 second after the end of systole (beginning of second heart sound). Explanations that have been advanced to explain this wave have differed considerably, largely due to difference of opinion in regard to the exact time of its onset and apparently also due to confusion as to just what portion of the cycle was considered as entering into the formation of this wave. The period from the end of the negative phase may show a single rise to a point well on in diastole, or the rise may show an interruption, at a point about coincident with the end of systole. Finally the first part may not show a well characterized wave but a definite and fairly sharp rise first becomes evident about the time of closure of the semilunar valves. Apparently the latter is the usual condition, while the flow of blood in the veins during this period may show certain variations from this at different times. Difficulty of exact analysis has arisen in the literature largely as a result of different descriptions of the character of the venous pulse during this period. Bard[2 3], Mackenzie[1], Hering[11], and Fredericq[6] describe the whole period beginning at the end of the negative phase following the first ventricular wave, and note the usual division at a point corresponding approximately with the dicrotic wave on the arterial curve. The whole period is thus divided into a late systolic and an early diastolic phase, the two waves being named according to the nomenclature of Bard *l* and *d*, and according to Hering *Vs* and *Vd*. In more recent literature it has been the tendency, at least among English and American writers, to ignore the systolic wave and consider only the one beginning at or near the onset of diastole. This was done in the observations of the present writer stated above and this feature denoted by the letter *v*, following the usual designation applied to it. Wenckebach[7], Porter[9], and others of the earlier writers regard the *v* wave as purely a diastolic event, beginning after the end of systole. Evidently they were concerned with tracings in which the systolic feature was not a prominent one. Mackenzie[1] notes the usual division occurring approximately at the end of systole and regards the whole phase as due to stasis, the inflow into the auricles during diastole of

these chambers gradually ceases and as the auricles fill the pressure gradually rises in the veins. Moreover in certain cases at least, Mackenzie assumes that actual regurgitation from the ventricle during its systole may play a part. François-Frank[26], Fredericq[5], Porter[9] and Wenckebach[7] explain it by a return of the auriculo-ventricular border to its normal position at the end of systole, following its displacement with the development of the negative phase on the venous pulse as described above. In other words, according to this interpretation, the positive wave results from a cessation of those factors producing the negative phase. Hering[10] believes the first part of this period, the systolic portion (*Vs*), is due to accumulation of blood in the auricle and stasis. The second part (*Vd*) he found still present in hearts under artificial perfusion, where the displacement of the base could be excluded. It would seem probable, that under most circumstances at least, both stasis and the return of the auriculo-ventricular border play a part, the first or systolic phase resulting largely from the former, the diastolic phase from the latter factor. Lewis[8], in a recent summary of the literature, inclines to this point of view, and points out that the relative importance of these two factors probably depends on the rapidity of emptying of the ventricle. With a prolonged systole, the blood may accumulate sufficiently to cause a considerable stasis before the second factor, namely the return of the base of the heart, comes into play. It would seem that more observations, as well as more careful analysis and comparison of venous pulse curves of different types, is necessary before our interpretation of this phase of the venous pulse is entirely satisfactory. The explanation described above would suggest the importance of determining the relative size of the first phase of this period (the *t* or *Vs* wave) with different durations of systole.

### 5. SECOND NEGATIVE PHASE.

The pressure within the auricles and great veins falls rapidly as a rule following the crest of the second ventricular wave. The onset of diastole in the ventricle is associated with a rapid fall of pressure in this chamber, and finally as the pressure falls below the auricular pressure, the auriculo-ventricular valves open and the blood from the auricle streams into the ventricle. The stasis in the auricle resulting from the factors discussed above entering into the formation of the second positive ventricular phase, is thus relieved, and the curve following the crest of this wave rapidly declines. The point reached is probably never as low as that of the first negative phase following the first ventricular wave, and indeed in many cases the decline is quite

small. This is the usual explanation applied to this phase. Perhaps other factors may come into play; the negative pressure in the ventricle at this period may be important in increasing the flow in the veins.

### 6. POSITIVE WAVES IN LATE DIASTOLE.

With pulse rate somewhat faster than the average, the cardiac cycle may end with the depression last described and the venous pulse curve show at once the onset of the auricular wave of the next cycle. Rihl[14] states that as a rule, the summit of the second ventricular wave represents the highest point of the venous pulse curve from this point until the beginning of the next cardiac cycle. With a very slow heart rate, however, he notes that the venous pulse curve may show a considerable rise before the next auricular wave, interpreted simply as a rise of venous pressure from progressive filling of the ventricles and auricles. As a result, however, of the work of Hirschfelder[28], Gibson[29] and others in the last few years, it is evident that the normal venous pulse with an average rate of heart beat, shows in the great majority of cases a definite fourth positive wave, occurring toward the end of diastole and which in all probability represents a definite occurrence in the ventricle and does not arise simply as a result of venous stasis as suggested by Rihl. The interpretation of this portion of the venous pulse and the possible relation that it bears to the cause of the third heart sound, will be discussed in the next section.

### THE THIRD HEART SOUND AND THE THIRD VENTRICULAR WAVE.

Gibson[29] in 1907 described in certain individuals in whom auscultation of the heart indicated a normal condition of the valves, a faint, deep toned and extremely brief sound occurring during the period of diastole, from 0.1 to 0.2 of a second after the second heart sound. He noted in two of the five cases in which he heard this sound, the presence of a positive wave on the venous pulse occurring at about the same time in the cardiac cycle, and stated his opinion that both could be explained by the same occurrence in the ventricle, namely a floating together of the cusps of the tricuspid valve following the period of most rapid filling of the ventricle. Henderson[30] showed by an analysis of the curve of the changes in volume of the ventricle obtained by an air tight chamber enclosing the ventricle and connected with a recording apparatus, that the greater part of the filling of the ventricle in preparation for the next beat occurs at once upon the completion of contraction and is completed very early in diastole. Only a relatively

small amount of blood in the ventricle at the beginning of its systole results from the auricular contraction; the ventricle is newly filled when this event occurs. At the end of systole, largely due probably to the descent of the base of the heart (the main factor in the production of the first negative phase of the venous pulse), the auricle is engorged with blood, and when the auriculo-ventricular valves open the blood rushes into the ventricle. As a result of the inrush of blood the ventricle is probably put under a monentary tension toward the end of the period of inflow, sufficient to produce a slight recoil of its distended walls, or at least, the inflow ceases quite abruptly (as marked by the so-called shoulder on the volume curve) when the chamber becomes full. This is supposed to be sufficient to produce a regurgitant wave toward the auricle, and a floating together of the cusps of the auriculo-ventricular valves. This impact or vibration of the valves causes the sound, the sudden cessation of inflow from the auricle, or perhaps an actual regurgitant wave, gives rise to a positive wave on the venous pulse. The same wave on the venous pulse described by Gibson, was described a few months earlier by Hirshfelder[28] as an occasional occurrence noted in individuals with normal hearts. Hirshfelder designated the wave by the letter *h*, and suggested a similar explanation to the one explained more in detail by Gibson. Fredericq[8] the year previous to the publication of Hirshfelder and Gibson, had described a similar wave on venous pulse tracings obtained from dogs with slow heart rate, but offered no explanation of its cause. The tracings of Theopald[31], published in 1907, show the same wave during vagus stimulation.

The third heart sound was recorded by Einthoven[32] in the same year by the use of the thread galvanometer in connection with a microphone, a method employed by him in previous work on the heart sounds[33]. A funnel, placed on the chest of the subject over the region of the cardiac base or apex, connected with a microphone included in an electrical current with the primary of an induction coil. Variations in the electrical resistance in the microphone as a result of the movement of the disc from impact of the sound waves, caused variations in the strength of the current flowing through the primary of the induction coil, and these in turn caused the production of induced currents in the secondary coil which produced movements of the thread of the galvanometer. These movements were photographed on a moving film or sheet of bromide paper contained in a suitable apparatus. Einthoven found that while the intensity of the sound varied somewhat, at its maximum intensity it was approximately two hundred times weaker than the first or second heart sound. Furthermore, as

a result of low vibration frequency, it must be even more difficult to hear than would be suggested by its low intensity. Gibson had already emphasized the difficulty of auscultation of this sound and noted the necessity of excluding all extraneous noises and strict concentration of the attention. Einthoven was unable to hear the sound in one subject in which a clear photographic record was obtained. His records show that the third sound begins from 0.11 to 0.15 seconds after the beginning of the second heart sound and varies from 0.02 to 0.03 seconds in duration. It was recorded only when the recording funnel was placed over the apex of the heart and not from the pulmonic or aortic areas. Gibson was also able to hear it only at the apex. Einthoven, however, believed that the sound may be observed over the aortic and pulmonic areas by a longer duration of the second sound in those regions, and finds some indication for this view in his records. He advances an entirely different explanation of the third sound from that proposed by Gibson, regarding it as being produced, not by any occurrence within the ventricle, but by an after vibration of the semilunar valves following the primary vibration, incident to the closure of the valves and which causes the second sound. These after vibrations are supposed to result from fluctuations in arterial pressure and are regarded as sufficient to produce a faint sound when the pressure variations are considerable.

Thayer[34] in 1908 noted the frequency of the occurrence of the *h* wave with the third heart sound and gave evidence to show that the time of occurrence of both of these features was close to that of termination of most rapid ventricular filling as shown by the volume curve of the ventricle. Furthermore, he found that in the presence of the wave and the sound, the protodiastolic elevation of the cardiagram was usually larger than in their absence. He regarded the evidence to be in favor of the view that all three of these features are produced by one and the same factor, namely a sudden inrush of blood into the ventricle during its period of most rapid filling. Thayer thus agrees with Gibson and Hirshfelder as to the cause of the wave and sound, while Einthoven explains the sound in a totally different manner and sees no relation between the sound and the wave.

The *h* wave had been described in the papers of Hirshfelder and Gibson as a relatively rare occurrence, although probably representing a normal event, which presumably in most hearts was not sufficiently pronounced to cause the development of a wave on the venous pulse. Eyster[36] in a study of a large number of venous pulse tracings from normal men, found that the *h* wave was present in practically all cases in which the heart rate was below seventy or seventy-five per minute.

In the second and third decades of life, at least, it is much more commonly present than absent, and must therefore be regarded as a feature of the average venous pulse. Thayer[37] in a second paper on the third heart sound, finds a similar frequency in the occurrence of this sound, at least in young adults. In this work he auscultated the hearts of 231 individuals with normal hearts. 90 of those cases were in the second decade and of those the third sound could be heard over the apex region in 84.4%. In later years the proportion of cases in which the sound is present diminishes, falling to 14% in the fifth and to zero in the sixth decade. He finds that while the sound is more frequently heard at the apex, it can be heard quite often over the base of the heart and in this differs from the statement of Gibson and Einthoven Furthermore, he states that while the sound is usually only heard in the recumbent position, in a few cases it may be heard in the erect posture. He explains this by the fact that the recumbent posture aids in the inflow of venous blood into the heart, the ventricular filling is therefore greater and the effects produced by the filling are therefore more pronounced. The third sound is especially pronounced in any condition in which the total quantity of blood entering the ventricle is large. Pathologically, this condition is pronounced in adherent pericardium and may give rise to a condition of protodiastolic gallop rhythm. In these cases the protodiastolic elevation of the cardiagram is frequently very large. Thayer comes to the same conclusion in regard to the cause of the sound as expressed in his first paper. Finally, he notes that the *h* wave is present in a considerable number of cases in which the third sound is heard, but the two are not necessarily associated.

The writer is now engaged in a study in man and the higher animals of the relation of the various waves of the venous pulse to the heart sounds, and of the occurrence and cause of the third heart sound. The results from a part of this work are now in press and will appear shortly in the Journal of Experimental Medicine. Certain results derived from this work, so far as they bear on the subject under discussion, follow. Venous pulse and heart sound records (recorded by the method of Einthoven) have been made from 20 men with normal hearts. All of these, with the exception of 2 were between 20 and 30 years of age. The third sound was present in 17, or 85%. Of these 17, seven showed an *h* wave, or 41.2%. Of the 3 individuals in whom the third sound was apparently absent, well developed *h* waves were present in two. Cardiagrams were obtained in 12 of the 20 cases, 7 of these showed well marked protodiastolic elevations, in all of which the third sound was present and in 6 of which the *h* wave was also

present. Of the 5 showing no protodiastolic elevation, 4 showed a third sound and two showed the *h* wave. As a rule, but not always, the third sound was of greater intensity in those cases in which the protodiastolic elevation on the cardiagram and the *h* wave on the venous pulse were large. The time relation of the third sound to the *h* wave was measured in 86 cardiac cycles from 17 individuals. This relation was found to be fairly constant, the sound preceding the beginning of the *h* wave in the majority of the cases by several hundredths of a second. The duration of the third sound in these cases averaged 0.036 seconds and its average time of occurrence after the beginning of the second heart sound was 0.172 seconds with a total variation in the individual cases between 0.155 and 0.205 seconds.

From the data at hand, it is evident that little can be concluded other than that the third heart sound and *h* wave on the venous pulse are common features in individuals who show no demonstrable signs of cardiac disease. While they are usually associated and occur practically at the same time in the cardiac cycle, nevertheless sometimes one may be present without the other and the degree of their development does not in all cases run parallel. It is hoped that the experimental work which is now in progress will throw more light on the question of the origin and association of these two features of the cardiac cycle.

Finally, there may be mentioned a fifth positive venous pulse wave, described by Eyster[36], occurring in man with a heart rate slower than the average. Further than the fact that observations upon the occurrence and behavior of this wave in man and experimental work in animals indicate that it is not due to a contraction of the venous or sinus region of the heart preceding the auricular contraction, nothing can be said as to its cause at the present time.

## REFERENCES TO LITERATURE.

1. Mackenzie—The Study of the Pulse and the Movement of the Heart, London, 1902.
2. Bard—American Journal of the Medical Sciences, July, 1907, p. 9. Journal de Physiologie et de Pathologie gènerale, 1906, p. 454.
3. Bard—Archives des Maladies du Coeur, des Vaisseaux et du Sang, 1, 1908, p. 337.
5. Fredericq—Archiv internationales de Physiologie, IV, 1906, 55, and V, 1907, 1.
6. Fredericq—Zentralblatt für Physiologie, XXII, 1908.
7. Wenckebach—Archiv für Anatomie und Physiologie, 1906, 297 and 1908, 53.
8. Lewis—Article in Further Advances in Physiology, Edited by L. Hill, London, 1909.
9. Porter—Journal of Physiology, 13, 1892, 513.

10. Hering—Archiv für die gesammte Physiologie, 106, 1904, 1.
11. Hering—Zentralblatt für Physiologie, 21.
12. Morrow—British Medical Journal, 1906, p. 1807.
13. Hering—Deutsche medizinische Wochenschrift, 46, 1907.
14. Rihl—Zeitschrift für experimentalle Pathologie und Therapie, VI, 616, 1909.
15. Erlanger—Journal Experimental Medicine, VII, 1905 and VIII, 1906.
16. Krumbhaar—Bulletin of Ayer Clinical Laboratory, Philadelphia, No. 6, 1910.
17. Riebald—Zeitschrift für klinische Medizin, 73, 1911, 1.
18. Friedrich—Deutsches Archiv für klinische Medizin, 1, 1866, 241.
19. Cushny and Grosh—Journal American Medical Association, XIX, 1907, 1254.
20. Rihl—Zeitschrift für experimentalle Pathologie und Therapie, VI, 646, 1909.
21. Delche—Archiv internationales de Physiologie, VII, 1908, 96.
22. Chauveau and Faivre, Gazette medicine de Paris, XI, 1856, 406.
23. Haycraft—Journal of Physiology, 12, 1891, 452.
24. Results as yet unpublished by the author.
25. Eyster—To appear shortly in the Journal of Experimental Medicine.
26. Francois Frank—Gazette hebdomadaire de medicine et chirurgie, 1882.
27. Francois Frank—Archives de physiologie normal et pathologique, 1890, 347.
28. Hirshfelder—Johns Hopkins Hospital Bulletin, XVI, VI, 1907, 265.
29. Gibson—Lancet, 1907, II, 1380.
30. Henderson—American Journal of Physiology, XVI, 1906, 325.
31. Theopald—Deutsches Archiv für klinische Medizin, XC, 1907, 85.
32. Einthoven—Archiv für die gesammte Physiologie, 120, 1907, 31.
33. Einthoven and Geluk—Archiv für die gesammte Physiologie, 117, 1907.
34. Thayer—Boston Medical and Surgical Journal, CLVIII, 1908, 713.
36. Eyster—Journal Experimental Medicine, XII, 1910, 257.
37. Thayer—Archives of Internal Medicine, 4, 1909, 297.

---

# INJURIES TO THE ORBIT.*

BY GILBERT E. SEAMAN, M. D.,

MILWAUKEE.

In the short time available for the reading of a paper before this Society, I would not attempt the orderly and systematic presentation of the various injuries to the orbit, but shall content myself with a brief discussion of what I consider to be the most important considerations involved.

---

*Read at the 65th Annual Meeting of the State Medical Society of Wisconsin, Waukesha, June 8, 1911.

Injuries to the bony walls and contents of the orbit are of relatively frequent occurrence, and are very often part of more general injuries involving the face and head and therefore should be of interest to the surgeon, the general practitioner, and the oculist as well.

The walls of the orbit are in some places exceedingly thin and are easily pierced by pointed weapons or pointed objects of any kind, such as sharp sticks, the point of a cane, umbrella, or the blade of a knife, scissors or similar instruments, and such injuries are of great importance from the fact that the eye itself often suffers, or the instrument and the force which has penetrated the orbital wall may go further and involve the brain or its membranes. This is particularly likely to occur in injuries involving the roof of the orbit which are often followed by intracranial hemorrhage, meningitis, or abscess of the brain, and result as these conditions generally do in death. Owing to the peculiar conformation of the orbit a wound made by a pointed instrument, especially where the wound is one of intent and made by a lunge or a thrust, is not likely to be of a glancing nature and is consequently more apt to penetrate deeply. I have seen several cases of orbital wounds which have involved the cranial cavity, one in particular in the person of a child seven or eight years of age where the upper lid had been penetrated by the pointed end of a curtain rod. The eye itself had escaped injury and what seemed at first to be a simple wound of the lid was followed by symptoms of meningitis and the child died from this cause at the end of two weeks. The roof of the orbit had been penetrated, there was extravasation of blood between the periosteum and the bone, great discoloration, edema and swelling of the lids and bulbar conjunctiva, coming on gradually, and most pronounced at the end of the third day with meningeal involvement and the result as set forth above.

Retrobulbar Hemorrhage, the result of pure accident is much less frequently seen by the ophthalmic surgeon than might be expected, when one takes into consideration the relative frequency of injuries to the head. These cases are generally in the hands of the general surgeon and are frequently of such a serious nature, involving as they often do fractures at the base of the skull and other serious injuries, that the ophthalmic features are considered of secondary importance. Retrobulbar hemorrhage due to traumatism is usually the result of *direct* wounds of the orbital vessels where the orbit has been penetrated by a foreign body, instrument, or weapon, or to *indirect* laceration of the vessels as occurs in injuries involving the bones of the orbit. In perhaps 90% of all cases of orbital hemorrhage there is more or less severe injury to the skull with fracture of the walls of the orbit. The

symptoms of orbital hemorrhage vary widely with the cause and the exact nature of the injury in each particular case, but of course the most pronounced and constant symptom is the exophthalmos and limitation of motility. The upper lid is generally tense and frequently almost immovable. The pupil is apt to be dilated and the vision interfered with by the pressure exerted upon the circulatory apparatus and nerve supply.

The treatment of such conditions depends of course upon the indications in the particular case at hand. Where the exophthalmos is great and the case is seen early, damage to the eye may be prevented by at least partially removing the blood by the use of an aspirating needle introduced deeply into the orbit, or by evacuating the clot through an incision. It is to be understood, however, that these measures are only to be resorted to in case the pressure appears to be so great as to endanger the safety of the eye. As a general rule the application of a pressure bandage, the ice bag, and such other simpler methods as are dictated by the conditions, are sufficient in most cases Spontaneous hemorrhages into the orbit have been observed in persons suffering from a hemorrhagic diathesis, in badly nourished children, in alcoholics, and in cases of arterio-sclerosis.

The prognosis as to permanent injury to the eye in an orbital hemorrhage is good in most cases, especially where prompt measures are taken for the relief of the pressure.

Fracture of the orbital plate of the ethmoid or fracture through the frontal sinus into the orbit, ofter result in *emphysema of the orbital tissues and eye lids:* a curious condition which is increased and sometimes produced by violent sneezing and blowing of the nose where conditions are such as to make possible a communication between the orbit and some of the adjacent cavities, *i. e.*, where the orbital plate is unusually thin in places or where it is diseased and may be broken through by the impact of air under high pressure. The form most frequently met with is the orbital-palpebral, where the air is found in the cellular tissue of both the orbit and lids.

I once saw a man who without any history of injury or disease presented himself to me with a marked emphysema of the orbital tissues and eye lids and protrusion of the eye. He related that a few minutes before he had violently blown his nose with this immediate result. Such cases are rare.

In injuries emphysema is usually the result of a contusing force in which the eye is violently driven backward against the nasal wall of the orbit and here the thin orbital plate of the ethmoid gives way and opens up a communication between the ethmoid cells and the

cellular tissue of the orbit, air is forced into the tissues with the resulting condition. It may occur directly after the injury or several hours later depending upon when the parts are subjected to increased air pressure by the act of sneezing or blowing the nose. It is manifested by prominence of the eye, swelling of the lids, pain, the peculiar elastic feel of air tumefaction, with crackling due to displacement of air under the pressure of the examining fingers, and as indicated above is a certain sign of injury to the bone in some part of the orbital wall. A light pressure bandage and avoidance of blowing the nose and sneezing is the only treatment necessary for this symptom of injury. If the emphysema is of considerable degree of small incision in the skin may be made through which the air may escape. The prognosis is good in these cases. It may be mentioned that emphysema due to injury may affect the conjunctiva and may appear in connection with extravasation of blood. Epistaxis is a frequent accompaniment of this condition. Where emphysema appears the injury is not apt to be severe because in the more serious injuries there are usually external wounds through which the air easily escapes.

Unwise interference or misdirected efforts for the relief of surgical disease in the ethmoidal, sphenoidal, frontal, and antral cavities have frequently resulted in perforation of the orbital cavity and in some cases with extremely serious results as in those noted below. Even so trivial a procedure as washing the antrum through the ostium maxillaris or an artificial perforation has been known to result, by reason of some defect in the walls of this cavity, in extravasation of fluid or air into the orbital cavity. On one occasion some years ago, such an accident occurred to a patient in the hands of an eminent surgeon who in attempting to aspirate pus from an anterior ethmoidal cell by a canula introduced into the infundibular opening caused a traumatic emphysema involving the soft structures on the right side of the face and completely closing the orbit. On another occasion a somewhat similar accident occurred while washing pus from the infundibular region, the small canula having entered a cavity. A few drops of normal salt solution were gently forced in when the patient gave an exclamation and clapped his hand to his right eye. Examination showed some amount of traumatic edema over the inner canthus which rapidly extended and temporarily prevented the opening of the eye. The patient fortunately recovered with no more serious result. On still another occasion a patient complained of intense pain resulting from an injection of dioxogen by a dentist into a suppurating antrum through the alveolus. Such an accident would seem to be unpardonable.

Of the more serious precedures which may have an injurious effect upon the contents of the orbital cavity one may suggest those radical operations upon the frontal sinuses of the Killian type which remove part of the orbital roof and in which injury to the pulley of the superior oblique muscle and the lachrymal apparatus is only avoided by the most pains-taking care. Likewise the injudicious use of the curette in the ethmoidal cellular region may perforate the orbital cavity and by direct effect, or as the result of hemorrhage, have very serious consequences.

I recently had occasion to see in consultation a young lady upon whom an operation had been done for supposed malignant tumor of the right nostril. The orbital plate of the ethmoid was broken through, a hematoma had formed and through pressure, pronounced exopthalmos, paralysis of the internal rectus muscle with marked outward turning of the eye, and blindness from pressure on the optic nerve had resulted. The eye, perhaps through unavoidable accident, was rendered not only a useless organ but an unsightly one as well.

Another case in point occurred in the practice of a colleague some years ago. A woman, forty years of age, had an infected antrum following the removal of a tooth. The antrum was drained with a canula through the alveolus. At a subsequent flushing with a 1 to 2000 bichoride solution, a strong stream was thrown into the antrum with a piston syringe, she immediately complained of great pain, swelling and edema of the tissues about the right orbit occurred, so that in two hours the eye was swollen shut. Four days later an incision at the lower orbital margin evacuated a considerable quantity of offensive pus. The swelling subsided but the eye was turned outwards and the patient complained of dimness of vision. An examination by an oculist at this time revealed swelling of the optic nerve and congestion of the fundus of both eyes. Vision continued to diminish and the eye soon became blind, and this was followed within a few months or a year by the same course in the other eye.

Fractures of the Bones of the Orbit may be due to direct violence, as those occasioned by blows producing contusions upon the orbital margins, by gun shot injuries or by foreign bodies or some instrument or weapon being driven into the cavity, or by indirect violence as a fall on the head or a blow causing fracture at the base. Fractures at the margin of the orbit are generally quite easily made out by palpation. There may be a depression at the site of the wound, tenderness, swelling and crepitation may be felt in many instances. In the examination of such a fracture, one should be certain if possible that

the depressed bone is not exerting serious pressure upon any of the underlying structures. Numerous injuries of the supercilliary ridge have been reported as resulting in blindness through unrecognized involvement of the globe or through hemorrhage or fracture at some point distant from the site of the blow; for instance one which involves the optic foramen and affects the nerve. In the healing of injuries of the supercilliary ridge involvement of the supraorbital nerve has frequently been observed to give rise to such reflex disturbances as persistent photophobia and blepharospasm, and also to disturbances of vision and accommodation and to severe neuralgia.

The treatment of fractures of the orbit does not differ in a general way from the treatment of fractures of any other portion of the skull and the indications are all along the lines laid down in general surgery, with the exception of course that owing to the injury that may be done to the brain or to the eye in any operative procedure there is not so free a field for action here as there is in fractures of other portions of the skull, and great care must be exercised in attempts at removal of fragments of bone. Where a fracture of the orbit is known to exist or where emphysema, hemorrhage into the orbit, discoloration and swelling of the lids, exophthalmos, paralysis of one or more of the extra ocular muscles, or disturbances of vision point to a probable fracture, the patient should be put absolutely at rest in bed, bowels should be freely open, and a non-stimulating diet prescribed and an aseptic dressing applied to the parts, or if the condition demands it, an ice bag should be used and in some instances local abstraction of blood by the leech or horteloupe resorted to.

In injuries involving the margins, walls, and contents of the orbit trophic disturbances of the fifth nerve may result with serious consequences. Several years ago, I saw an interesting case of a young man who had been struck by a flying piece of glass from an exploded water gauge of an engine. The injury was just above the malar eminence and close to the orbital margin. A few months after the injury he enlisted in the army and at the time of his physical examination, there was a small nipple of tissue at the site of the wound, and a minute sinus discharging a small quantity of muco-purulent matter. The condition was not considered serious enough to warrant his rejection as a recruit. About three months after his admission to the army there was an increase in the discharge and more swelling and thickening over the site of the injury. On examination it was determined that there was some necrosis of the malar bone, an incision was made and the necrosed bone was removed. The wound did not heal promptly. There was great pain and tenderness over the face and temple,

the skin ulcerated and after many months healed with depressed scar over much of the distribution of the fifth nerve on that side of the face. During this period the cornea was insensitive and finally broke down and ulcerated. The vision was destroyed and the eye was later enucleated.

## Foreign Bodies in the Orbit.

The penetration and lodgment of a foreign body in the orbital cavity is one of the most serious accidents which may befall the eye, and yet foreign bodies of large size may lodge in the orbital tissues for a long time without causing great disturbance. Many such cases are on record, some of them of the most curious and surprising character. Where large foreign bodies of wood, stone, glass or metal have entered the orbit and penetrated some one of the neighboring sinuses without producing the serious consequences that one would look for under the circumstances, these foreign bodies, even the larger ones, may escape detection for a considerable length of time. Such was the case in the well known instance cited by Carter and quoted by Lawson in "Injuries of the Eye" where a man 73 years of age fell down a dark stairway and injured the nasal side of the right eye. A few days later he consulted a surgeon who found a ragged conjunctival wound and much swelling of the lids, and applied a simple dressing and saw the case at intervals for the next week, when it was discovered that there was a foreign body in the wound which appeared to be a piece of iron. An attempt at removal was made with forceps and this was accomplished with much difficulty. The foreign body proved to be a cast iron hat peg 3 3/10 inches in length, and weighed 25 scruples. The hat peg was one of a row which had been screwed to the wall at the bottom of the staircase and had remained in the orbit between ten and twenty days. The surgeon who treated the case gave it as his opinion that the point of the foreign body had entered the antrum of the opposite side. The case made a prompt and complete recovery. And then there is the interesting case reported by Nelaton and frequently quoted where a young man applied for treatment for what was supposed to be a lacrymal fistula and stated that three years before he had received a blow of such severity that it had rendered him unconscious for several hours. At the time of the injury he was taken to a hospital and the wound at the inner angle of the left eye was examined with a probe. It was believed at that time that a splinter of the superior maxillary bone had been driven between the eye and the nasal wall of the orbit. An attempt was made to remove the supposed splinter without success. The eye itself was uninjured except that

there was a dilated pupil and limitation of inward movement of the globe. Healing of the wound took place after considerable suppuration leaving only a fistulous opening and this condition existed together with divergent strabismus and discoloration of the globe. The fistula and sinus were probed and notwithstanding the repeated assertions of the patient that there was no foreign body present and that the umbrella had not been broken by the blow, an incision over the lower margin of the orbit revealed the presence of the ivory umbrella handle 1⅝ inches in length and over a half an inch in thickness. The patient made a good recovery and without serious impairment to vision.

The presence of a foreign body in the orbit is often manifested by suppuration and by the formation of a fistula, where the foreign body has remained any length of time so that the presence of a discharging fistula with the history of an injury should at once direct one's attention to determining whether there is a foreign body in the orbit. Several years ago, I saw a workman who had been injured by being struck on the head by the limb of a falling tree ten months before he came to me. He had a wound of the upper eye lid close to the orbital margin and at the site of this wound there was a discharging fistula. The case had been treated by a number of physicians and by various means without success. The fistula continued to discharge. Careful examination revealed the presence of a foreign body, an incision was made and the foreign body was removed with forceps. It proved to be a forked piece of the branch of a tree, two inches long and ¼ inch in diameter which lay close to the upper orbital wall. Prompt recovery took place. There had been no injury to the eye itself. In all cases where there may be a foreign body the most careful search should be made and if necessary the X-ray resorted to. Foreign bodies in the orbit may produce orbital phlegmon, inflammations of the optic nerve, and may result in blindness, hence their prompt removal is necessary and it must be remembered that they can be more easily removed before swelling and inflammation occur. In the removal it goes without saying that they should be extracted through the channel of entrance by preference. It is to be understood that the foregoing relates to those cases in which immediate attempts at removal are indicated. There are some cases, however, where the attempt at removal must be deferred or not made at all. Such small bodies as shot may become encysted and cause less damage by their presence than would be involved in attempts at removal. Metallic foreign bodies of magnetisable nature may be accurately located by the X-ray and frequently successfully extracted through the channel of entrance by the use of the giant magnet.

# MEDICAL INSPECTION OF SCHOOLS.*

BY RICHARD W. JONES, M. D.,

WAUSAU.

We are living in an era when the movement most popular throughout all classes of our national life is that of conservation of our natural resources. We are endeavoring to regulate the disposal of our forests, our native water power, our public lands, etc. It behooves the physicians of this country to call the attention of the public to our most important natural resource—our future citizens. The school children of to-day will be the citizens of tomorrow. Anything that we can do by our efforts to-day to strengthen the growing generation will lessen the burden of the state twenty years from now in the support of incompetents. Anything we can do in our time to raise the average of citizenship, intellectually and physically is worthy of our best efforts and time.

Examination of school children by medical men has passed the experimental stage. While quite recent in the United States, in Europe it is already an established fact, and in some of the Continental states has been in use for years. Some of the larger cities of Europe have had modified inspection for 30 or 40 years. Belgium has had sanitary officials to inspect the schools since 1884. Various German cities have had systems of more or less efficiency for years. The method in use at Wiesbaden was tried out very carefully and proved so successful that about 1898 is was adopted throughout all Germany. France has given the movement considerable impetus and the French school has developed a system second to none in efficiency. A journal is published in the interests of school inspection and is sustained by a national organization. England in 1898 inaugurated a systematic national plan for the examination of school children. This has been adopted in almost every city of the British Isles. Even the smaller villages have taken up the work so that practically every child in the land is given a physical examination three or four times yearly, and a record kept of the same. Cairo, Egypt, has employed school inspectors since 1883. Chili has had a partial system since 1888. Argentine Republic has a very complete organization. Japan has had national inspection of schools since 1898. Various other countries have made advances along these lines that surpass anything we have in America.

---

*Read at the 65th Annual Meeting of the State Medical Society of Wisconsin, Waukesha, June 8, 1911.

I simply mention these few to show how far behind the rest of the world we are in this movement.

In our country New York was the first city to do anything along these lines although Boston had the first organized system. Chicago, Philadelphia and others of our larger cities soon followed the lead of New York and Boston, and at the present time practically all of the greater cities have school inspection. Various states have some sort of law covering the question. Massachusetts has had compulsory examination of school children since 1906. Several states have laws covering the examination of the eyes and ears and some examine for excludable disease. In Wisconsin we have a bill up before this legislature making provision whereby any board of education can install some system of school inspection. The chances of passing this bill during this session, are probably very slight, but it is a step in the right direction, and should receive the support of all physicians.

The memorandum of the British Board of Education on Medical Inspection of Schools, states in a few brief words the fundamental basis upon which medical inspection rests. It says, "The law of 1898 is founded on a recognition of the close connection which exists between the physical and mental condition of the children and the whole process of education, and recognizes the importance of a satisfactory environment, physical and educational, and by bringing into greater prominence the effect of environment upon the personality of the individual child seeks to procure ultimately for every child, normal or defective, conditions of life compatible with that full and effective development of its organic functions, its special senses and its mental powers which constitute a true education."

Between the ages of five and sixteen are the most important years in the development of the individual. During this period of life mental and physical habits are formed which endure throughout existence. During this period of growth the child should be placed in the most favorable surroundings for physical growth and mental development.

The average child spends five and one-half hours of every school day in association with other children, four and one-half hours in the school room, and the rest of the time in play. Our schools are administered for the people by boards of education, or in case of parochial schools, by their own governing boards. We intrust the well-being of our children to these boards, constituted, many of them of people ignorant of the first principles of sanitary requirements with regard to school buildings, sanitation, etc. We expect the teachers to do a thousand and one things that they never were intended to do, to recog-

nize and exclude contagious diseases and in cases where the parents are negligent, to diagnose ailments in children which are difficult for a physician to discover.

One of the requirements of our school law, is that children between seven and fifteen must attend school. In the democracy of our public schools all are thrown together—the child gently nurtured and carefully cared for, is thrown into intimate associations with the son or daughter of parents who scarcely ever see their off-spring. Now if we are going to enforce our truancy regulations we must be able to assure parents who care for the safety of their children, that our schools are safe places, that the children can mingle without danger of becoming infected with disease—that everything is being done to promote the health and safe keeping of the children while at school. The school is the only place where we have governmental control during the development period, during the period when children are peculiarly susceptible to contagious diseases. How easy it is for a contagious disease to become disseminated throughout a school it is easy to understand. How easily one case of scabies can infect scores of others every one can see. I have seen one undiscovered case of scarlet fever infect ten or twelve out of one room of children. In one of the rooms of our grade schools last year, case after case of scarlet fever developed for two or three weeks in spite of repeated examinations of the children, fumigation of the room, etc. One case was finally discovered in which a fine desquamation was present on the feet although it could only be seen by the help of a magnifying glass. The child had not been sick, had not been out of school, in fact showed no signs of having been ill. In spite of this, it was thought wise to isolate him. The boy was sent home, the house quarantined and all the books in the school room burned. Since then we have had no more cases from that room. This is but one instance of many that might occur, and is simply one of the arguments that can be advanced in favor of medical inspection.

Every child is entitled to a square deal. The first duty of the state is to safe-guard the individual from himself as well as others. How much importance then, must be placed upon the question of physical defectiveness as a cause for mental backwardness? Gulick and Ayres in their book on medical inspection of schools from which I have quoted largely in this paper, have given both sides of the question considerable consideration, and after quoting very many statistics have come to the conclusion that physical defects cut very little figure in the school progress of a child. I cannot entirely agree with them. I think every one must admit that the main cause for a

child being backward in school work is irregularity of attendance. No boy or girl can keep up in their school work and be absent one-half the time from school. Now children with adenoids or enlarged tonsils are hypersusceptible to colds. Children with incorrected hyperopia, myopia, astigmatism, or other eye troubles can not stand prolonged visual concentration and therefore, have frequent headaches. Children who are slightly deaf fail to hear everything that is said, fail to thoroughly understand, lose interest and are soon classed among the backward children. These are but a few cases among the many. Each one because of his weaknesses has to stay at home from school and falls behind in his work. Now with our medical inspection these cases are discovered, the cause for their frequent absences removed or alleviated, and the child's school work improves with his more regular attendance.

The argument has been raised that enforcing any law for medical inspection is infringing upon personal liberty. If that is true, what right have we to enforce any of our school laws, especially those regarding attendance. We have as much moral right to assure ourselves that every school child is having an equal chance with his fellows, that he is not a menace to his fellow students, nor a hindrance to himself, as we have to make the child attend school.

Medical inspection of schools must be considered from two standpoints. First, inspection for the detection and exclusion of contagious diseases. Second, inspection to determine the physical condition of the children. The first is very simple and can be followed out in many different ways. Anywhere where a physician is willing to do the work arrangements can be made for the teachers to send all suspicious cases to the physician, or have the physician call at regular intervals at the schools. The second is a much more complex system, requires more time and work by the physician and a more elaborate card index to control the work. The plan followed in Wiesbaden, Germany, is a good illustration. Briefly the provisions of the Wiesbaden plan are, systematic examination of heart, lungs, throat, spine, skin and higher sense organs, and in case of boys for hernia. The findings are entered on the report blank which accompanies the child from grade to grade in his school life. Twice a year the teacher records the height and weight of the pupils. Whenever necessary, chest measurements are taken and entered on the records. These examinations are made the third, fifth and eighth years.

Inspection of schools in Wausau was a movement inaugurated in much the same way as similar movements elsewhere. During the past few years, Wausau and the adjacent country has been scourged with contagious diseases, especially scarlet fever. During the winter of

1909 and '10, scarlatina assumed a very malignant type. Several cases died within thirty-six hours from the beginning of illness. This, together with the fact that it seemed impossible to detect all the cases, many of them being very light, lead us to believe that an examination of all pupils absent from school from any reason whatsoever, might tend to get the epidemic under control. This was suggested to the board of education and after a short time, the system now in use was installed. At first the intention was simply to examine for contagious diseases, but soon the work was extended to cover physical examination of the pupils. Our endeavor now is to detect and exclude all cases of contagious diseases and also to examine and diagnose any child who seems to the teacher to be deficient in any way. All childhen who are backward in their work are sent to the inspector to see if there is any physical cause for their condition. All absentees are given physical examinations on their return to school. The teachers are instructed along simple lines of diagnosis and supplied with charts covering the symptoms suggestive of various physical troubles. Examining physicians are appointed by the health commissioner, with the approval of the city superintendent of schools, and are paid by the board of education. They are not allowed to give any treatments whatever.

The aim of the work in Wausau has been to make it as simple as possible and also cover the ground. We have endeavored to strike an average between the simpler and the more elaborate system. We use but four cards in all our work. We have a card for the daily recording of work done by the examiner of each school, another card which is brought by the pupil from the teacher, upon which is the pupil's name, address, school, and blank for instructions as to disposition for the guidance of the teacher. We have another card which is filled out and sent home with the child when excluded from school for any reason. We exclude for the ordinary contagious diseases, including tonsillitis, also impetigo contagiosa, scabies, and other contagious skin diseases. Cases with suspicious looking throats have cultures made before being passed by the inspector. All cases of scarlatina and diphtheria must get a permit from the department of health before returning to school. We also have a physical examination blank adopted from the blank used in the Pasadena schools. On one side of this sheet are twenty-five points to which the teacher's attention is attracted. She is instructed to check off any of these that seem worthy of her notice before sending the child to the examiner. On the reverse side of this sheet are blanks where are entered the condition of heart, lungs, eyes, ears, throat, nervous system and anything else which seem worthy of notice. A diagnosis is made by the inspector and entered

on the bottom of the sheet with recommendations for treatment if any.

There are eight school buildings, two of them situated within half a block of each other, so that seven physicians can easily do the necessary work. Each physician visits his school center at 9 o'clock on each morning of the five schools days of the week. Physicians receive one dollar for each visit, making a cost of seven dollars per day. These school centers are conveniently situated for the parochial schools as well as for the public schools and the children of parochial schools are sent to the examining physicians just as the children of the public schools are. Every child who has been absent one-half day or more without the prior knowledge and consent of the teacher is sent to the examining physician of his school center and must obtain a clean bill of health before he resumes his school work. Any child whom the teacher suspects of having a contagious disease or having been exposed to such a disease, and all children whom the teacher suspects of having adenoid growths, defective hearing or eye sight, enlarged tonsils or any other defect which may interfere with successful work, are sent to the examining physician and the physician makes a report immediately both to the teacher and to the parent. All cases of contagion and all suspicious cases are promptly sent home and reported to the Department of Health. If the parent fails to give proper attention to the child after having been notified by the physician the teacher discovers this by inquiry later and follows it up by a personal visit herself, or asks one of the two visiting nurses to go to the home and give suitable instructions to the parent. A free infirmary and two visiting nurses are supported by private subscription. In this free infirmary children in need of medical or surgical aid are treated free of charge. If upon investigation their parents are found to be too poor to afford proper medical treatment cards which entitle children to treatment free of charge are distributed to be given to the indigent pupils.

We have found that the most valuable aid in connection with our school work in Wausau has been the work of the visiting nurse. I cannot say too much in praise of the movement that has made it possible to obtain the services of a graduate nurse in such a way. The work of the St. John's Infirmary during the last year has been in itself a revelation to many, of the work that can be done in a smaller city, by a free dispensary when properly conducted. This is an institution that has been supported entirely by free subscription, undenominational in character, and doing nothing but charity work. They have been kind enough during the past year to allow us the use of their visiting nurse, for the work of the schools. Whenever a case of ade-

noids or enlarged tonsils was reported, the name and address of the child was given to the visiting nurse. In fact, when any diseases were reported the nurse was given the name and address of the patient. She has made it her business to follow up these cases in so far as her time would allow her to do. She would see the parents of the children, give them good advice regarding the treatment of the child, and if the people were so poor that they could not afford to pay for the services of a physician, the patients were taken to the St. John's Infirmary, and there attended by the attending staff of the institution. The report of the visiting nurse for the school year shows the following: Number of children visiting the infirmary 208, number of visits by children to the infirmary 370, number of visits made by nurse at the homes of the children 408; 21 children had operations performed at the infirmary, 141 were given other treatment, and a great many cases, in fact a large majority referred to their family physician for treatment. This report includes nothing but work done for the schools, and does not cover the general work of the visiting nurse at all. Every effort has been made to admit for treatment at the infirmary, only such children as would otherwise receive none. Visits to homes are not primarily for the purpose of securing infirmary attendants, but to secure for the child needed medical attention, preferably by the family physician.

The results of our school work have been satisfactory in the main. While we have not covered the ground as thoroughly as we might have done, we have at least made a good start. During the year, up to May 1st, the inspectors have examined 6,677 children for contagious diseases and about 1,600 have had physical examinations, with the following results: scarlet fever, 13 cases; whooping cough, 5; measles, 15; chicken pox, 6; scabies, 33; impetigo contagiosa, 35; enlarged tonsils, 744; adenoids, 170; defective vision, 43; defective hearing, 6; tonsillitis, 85; several cases of chorea and other things which I need not mention. The question to ask is whether it has been worth while. One cannot decide by looking at it from the standpoint of the physician alone. The views of the teacher on this question may differ from that of the inspector. I will quote from the last report of the superintendent of schools, dated April 1, 1911.

"The effect of medical inspection has been to increase the average daily attendance in the schools. With practically the same total enrollment this year that there was last year, there have been 8,277½ days more attendance than for the corresponding months of last year. The same number of teachers have been able to care for an average of eighty-three more pupils in the daily attendance this year than we had

last year, at no additional expense for instruction, and with a saving of much loss of time to the school as a whole. The greater regularity of attendance has made the work of the grade teachers easier also because less time had to be given to the absentees than was required a year ago. The increased attendance was due to several causes, chief of which were the confidence established in the community that every precaution was being taken to safeguard the health of the children, and the little ailments discovered in time and promptly attended to prevented their becoming more serious and requiring longer absence from school. Among a certain class, too, a superstitious dread of medical inspection caused the parents to refrain from keeping children from school for trivial reasons."

From the standpoint of the inspector it would be impossible to say whether the result attained has been as decisive as we hoped for. There is no doubt that school inspection has been a great help in checking the spread of contagious disease in the city. We have had suspicious cases that have been sent home by the inspectors with sore throats, fever, etc., that proved later to be scarlet fever or diphtheria, and the cases quarantined. Now if these children had been taken sick in the school room, a great many others would have been exposed to the infection, and might possibly have contracted the disease. This has been prevented because of the early detection of the cases by the inspectors.

Still, however important the detection of contagious disease has been as a part of our inspection of schools, it must in the end be considered inferior in importance to the work of the other branch of the work, that of the physical examination of the pupils. The results of this work cannot be seen at this short time. How much good one will accomplish by having cases of enlarged tonsils and adenoids attended to, it is impossible to say, but there is no question that the future will show that these same children attended to, will make better citizens than those who have never had anything done. In this way the work is worth while, and in doing this work one should never lose sight of the fact that we are working for the future, and not for the immediate present. Our results can be measured only in terms of years, and not by that of months. The fallacy of our system has been that we have not had enough authority to enforce our rulings. Many parents refuse to have their children examined or to follow the instructions of the examiners, even after being instructed by the nurse. I believe we should have legislation to cover this point. That we should have compulsory examinations of the school children, at least for contagious diseases and eye and ear diseases with possibly diseases

of the nervous system thrown in. That this law should provide for the control locally of the examining bodies, and that the examining physicians should be trained along these special lines. I think the day will come in Wisconsin, when we shall have such a law. Until that day does arrive, we can only do as we have been endeavoring to do in Wausau the last year, the best we can.

**Discussion.**

DR. GEORGE P. BARTH, Milwaukee: Wausau is to be congratulated on the splendid inspection that it has. In Milwaukee medical inspection of schools was begun in April, 1909. Since then 10 physicians have been appointed as assistant medical inspectors, and one dental inspector.

For the purposes of examination in Milwaukee the city is divided into geographical districts, each physician having charge of one district. The size of the district varies, the ones in the slums being smaller than those in the outskirts, because of the larger number of cases which the physician would see in those schools.

The system adopted in Milwaukee is practically the same as that of Wausau, but the physician instead of being paid a dollar a visit receives a monthly salary of $60 and is required to give from two to two and a half hours each school morning to school work. This gives them about $3 a day for their visits in the schools.

Medical inspection should go further than the mere examination of the children for contagious disease or physical defect and in Milwaukee we are attempting to make it go further. It should begin at the entrance to the school yard. The medical department should be the consulting hygienic department for all the other departments of the school system in matters of school hygiene, such as the sanitary condition of the yard, the construction of the school buildings, the heating, lighting and ventilating, the subject of toilets, the cleanliness of the school—all these points are looked after in Milwaukee.

The results of medical inspection have been very gratifying in Milwaukee and the effect is being shown more clearly every day in that the people take better care of their children, send them to school in better condition, and in better home sanitation for often when the nurse goes to the home in following up the visits of the physician in the school, she finds the entire family busily engaged in improving the hygienic conditions of the home, and also their personal hygiene.

In Milwaukee, due to the kindness of the dentists of Milwaukee all indigent children are treated free as far as their teeth are concerned. They incorporated under the name of the Free Dental Clinic Association of Milwaukee and established a dental dispensary in the city hall in connection with the medical department.

In behalf of the children I want to take this occasion also, to thank the Children's Free Hospital and all the doctors of the city of Milwaukee, especially the specialists. Where a child has been recommended for treatment by the department of inspection of the schools, they have one and all taken hold and given the children the necessary treatment where the parents proved unable to

pay fees. The matter of indigency is carefully looked into, the department of inspection maintaining close affiliations with every relief and charity organization in the city. The financial status of the parents of every child applying for free treatment is carefully investigated, and upon the results of this investigation depends whether it shall receive a card which entitles it to free treatment or not.

The Board has given the department of medical inspection $500 wherewith to purchase glasses for indigent pupils.

Further than that the medical inspection of schools should deal with another problem, and that is the problem of locating children in schools in which they would benefit most. Every school system having in charge a thousand children or more should have special schools. In Milwaukee we have a number of such schools, some recently established and some which have been in existence for a longer period of time. We have three day classes for the blind, where children who are unable to do the school work owing to blindness or defective sight, are sent for instruction. The Braille system is taught. We have three schools for defective speech. There are 58 children in these centers now undergoing treatment for the cure of stuttering and stammering and defective speech. We have discharged 28 as cured and expect before the end of the month to discharge 10 more. There are 99 on the waiting list for entrance to these schools.

There is also the problem of the crippled. In Milwaukee we have not established a school for the crippled, but I now have on file the names of 129 cripples who should be in a special school—to whom the sitting in ordinary school furniture is a matter of some difficulty, even of some pain.

Another form of school is the open air school and the open air room. Many children return to the schoolroom discharged by the family physician as recovered from sickness but who are not in a condition at once to enter upon the full duties of the schoolroom, that is to cover the ordinary school curriculum. These children ought to be sent to some convalescent school or to some open air school until they have thoroughly regained their health. The open air school also might well take care of incipient tuberculosis which is quite prevalent in any large city. Some place the percentage of tuberculosis among school children as high as 2½ or 2¾ per cent; one investigator in France as high as 5.6 per cent of all school children.

Then there is the school for the deaf and the dumb. We have two such schools in Milwaukee.

We also have two schools for the mentally exceptional children. In these schools are segregated children who are mentally different from the ordinary child. The conscientious teacher will devote a great deal of her time and energy in trying to bring such a child up to class standard. This in most cases cannot be done and results in the production of a tired, nervous teacher whose efficiency in the class-room is thereby greatly reduced. Such children should be removed from the regular class-room and placed in a school where they may be given a specialized curriculum composed of such studies as they can master and where they may proceed at a pace compatible with their mental capabilities. For instance in the Milwaukee exceptional school a child may be in the first grade in arithmetic and in the fourth or fifth grade

in reading, spelling, geography or some kindred subject. Much attention is also paid to manual training and to gymnastics because muscular co-ordination is almost always lacking in these children.

Then there is another class of children in which the department of medical inspection can be of material assistance, i. e. the truant and difficult child. The truancy department refers these children to the medical department for examination, to discover in how far these children are responsible for their acts of criminality or illegality.

In the experiments undertaken at the psychological clinic at the University of Pennsylvania, it was distinctly shown that a difficult child, a truant child, may be changed into a docile, well-behaving child, if that child be given special work that will interest it.

Truancy usually has its beginning as follows: The child begins school at the usual age, but constantly lags through its inability to master the curriculum as offered. The child becomes dissatisfied; its dissatisfaction soon expresses itself by truancy, and the step following truancy is thievery. There you have the youthful criminal. Put that child into a class that interests him and you save that much court procedure and the expense attendant thereon.

In Italy it was found that crime increases from 2.04 per cent in children under 14, to 6.24 per cent in children from 14 to 18. In Germany of 14,835 convictions 41 per cent were in children under 21 years of age. It seems to me by our special schools, our truancy schools, our detention schools, we can save a great deal of this future criminality by interesting pupils in their work.

Now with respect to cleanliness which Dr. Jones mentioned. In Milwaukee the common council passed an ordinance making all parents culpable who do not send their children to school in a cleanly condition. For instance a case of pediculosis is given 14 days in which to clean up absolutely; a case of bodily filth is given 24 hours; a case of impetigo contagiosa 14 days; and thus down the list; and if the parents do not heed the commands of the medical inspector to clean up the children, they are brought into court and fined or imprisoned, the fine being from $1 to $50, and the imprisonment from 10 to 60 days in the county jail. (Great applause.)

Dr. C. R. Bardeen, Madison: Mr. President and Members of the Society: You have been fortunate enough this afternoon to hear talks from two people who are really doing perhaps the best work in the state so far as I know along the lines under discussion. In Milwaukee mighty good progress is being made under Dr. Barth's leadership. In Wausau they are doing more effective work than in any of the smaller cities, although I understand in some 30 cities something is done. I may be mistaken about that, but certainly they are doing very effective work there.

In Madison we are not doing much of anything so far. They had a nurse around the schools last year, but no real medical inspection. The schoolboard there feel that something ought to be done. They had a nurse under their auspices do some examinations, and statistics were gotten up which are more or less doubtful, because no medical man was behind them. The medical society has appointed a committee to study the question. This committee has not yet found a way out, because there is no sign that any

liberal appropriation can be made, and so I have come down here today rather more to learn about the best methods of medical inspection than to give any information, although I am on that committee.

The need of medical inspection in the schools has come out somewhat indirectly in the examination which we make at the University of the students who come there. Only 25 per cent of the young men are perfectly normal, that is, of the freshmen, and the woman medical inspector found only 6 per cent of the young women perfectly normal. I imagine she was pretty rigid in her standards of normality; but defects more or less serious can be found in 75 per cent of the students that come down there. The really serious defects are of course much smaller in number, and a good share of these defects could undoubtedly have been guarded against by proper medical inspection in the schools.

One of the most beloved members of the society likes to tell about his son, who was not a very brilliant student in the public schools; it took him five years to get through the University; and then by mere chance he got some eyeglasses, and then he stood pretty near at the head of his class in the medical college to which he went, and has been about as smart as you can find them ever since. The early trouble might have been avoided if his eyes had been examined.

The public has been well educated to what is needed to be done for general public education. They are pretty fairly liberal in the support of schools outside, perhaps, of some country districts. They are pretty liberal in all the cities and state at large; but the public does not at all understand what it ought to do for public health. It is very niggardly; and the physicians have to give a great deal of service for practically nothing to help out what public health work is done. I think that one of the most important things for the medical profession of this state to do is to educate the public in every possible way up to the need of liberal support along public health lines. The men who work along public health lines ought to be paid an adequate salary and ought to devote themselves to that kind of work. And the public ought to be educated up to doing that, and while this morning Dr. Jones pointed out the value in the schools of the medical inspection, and Dr. Barth called attention to the need of having medical men look after sanitation in the schools, I think there is a third relation between public education and medicine, and that is the education along health lines, along the need of proper public health measures, and that this will have to fall largely on the medical profession, and for a time, at least, will have to be largely a free gift from the medical profession to the public.

Now, in establishing school inspection the question comes up under what auspices it should be established; whether the Board of Health should have control of the medical inspection of the schools or the Board of Education.

In most communities the Board of Education is fairly outside of petty partisan politics, while in most communities the Board of Health is up to its neck in that kind of politics, and for that reason medical inspection in schools has for the most part been more successful when under the Board of Education than when under the Board of Health. If the Board of Health were outside of politics and given the kind of appropriation it ought to have, it is possible that that would be the place for the medical inspector, his staff,

assistant physicians and nurses. Of course when a community is fortunate enough to have a man as good as Dr. Jones, who combines both offices in such a good way, such a town is to be congratulated. For the smaller cities it seems to me the most economical way would be to hire the full time of one or two men to look after the public health work and the medical school inspection; but at the present time I think one will have to study out and see how to get an entering wedge, and then gradually educate the public up to liberal support in these most important lines.

At the University we are going to start next year a course for public health officers, and shall hope to have some lectures at least given on medical school inspection, and I think we shall have to introduce in the teachers' course there compulsory work along these lines, so that at least as far as the University is concerned we will do what we can to educate the public up to a proper support of this line of work. (Applause.)

Dr. Charles S. Sheldon, Madison: This joke of Dr. Bardeen about my son Stewart to the effect that we had to drag him by the hair of his head and skin of his teeth through the high school and a five-year course at the University, and that he then went to the medical school and there distinguished himself, is all true. That is, Stewart thinks it was true, simply because he discovered when he got down to Chicago that he had defective eyesight which made him nervous. After he had applied himself for a certain length of time, he could not apply himself any more, but wanted to go out and see the girls. (Laughter.) And that illustrates the supreme importance of this subject, which I think is one of the most important subjects before the community and medical profession. I think it concerns us as much as citizens who are desirous to do the best we can for the welfare of our country at large, as it does as physicians. We know that the future physical welfare of every man and woman is determined by the experience of the first few years of life, and a good start, as you know, is everything; and we owe our boys and girls as well as our babies, for that matter, a good start in life. They are entitled to it. If we bring them into the world we ought to give them a good start. We know that the period of childhood is more susceptible to all diseases than later life, and so this matter of medical inspection comes in, it seems to me, very forcibly, so far as our schoolrooms are concerned, in the prevention of contagious diseases. The school room should be a place where health is promoted, not a place where health is threatened, and as in so many instances where disease is contracted simply because these children are crowded together in schoolrooms, ill-ventilated and without the hygienic and sanitary methods that should prevail in such places. The economic waste, the potential loss, which comes from the neglect of the community, and particularly of the medical profession in these matters, it seems to me is enormous, and we should attend to it before it is too late; and so it seems to me we should interest ourselves as a profession more actively and more generally in this matter of school inspection. It appears to me that ultimately it must be a state wide institution, with a state superintendent, who shall call these supervisors, these inspectors, together from time to time, for meetings two or three times a year, to instruct them to systematize, to coordinate and make the work more uniform as far as its application and use in our various schools is concerned; and there should be meetings of the

teachers from time to time, it seems to me, in cities for instruction by the inspector. And I think it might be very useful for the teachers to call the parents together and to instruct them as to the fundamental conditions of hygiene, of the care of the body, of the family, of the house, etc., to carry out this method to its fullest extent; and as has been said, after the medical inspector has been through and has given his report, the nurse should follow these children to their homes and try to instruct the parents, to the end that the children shall receive proper medical attention if it be necessary.

It seems to me we should awaken to the importance of this subject. We should not expect to pick out any one at random for this purpose. It requires a man of infinite tact, of great wisdom, of sufficient experience, to detect all these incipient difficulties in children early, and it seems to me that in places of any considerable size a man could devote his whole time, and be enabled to give up the renumeration of private practice entirely, if he is going to do the best work, and he should have a salary commensurate with his work. We see political officers of one kind and another with large salaries attached, which the people seem to be willing to pay, whether they earn their money or not, and it seems to me in the interests of the coming generations, of the future of our American people, that the citizenship of our country should awaken to the supreme importance of this matter of taking care of our children, and be willing to give as good remuneration for work of that kind as they are for puny political offices, which most of us cannot appreciate at all. So I say, let us wake up on this subject. (Applause.)

Dr. G. E. Hoyt (A State Senator, not a member of the Society): If there be a word of truth in the remarks of the speaker just on the floor, it seems to me it is worth the interest of this body, its efforts and its energy, to bring about the desired end by means which will be more effective than have now been availed of or up to date have been availed of. I know it may become a very effective instrumentality to that end.

In the present session of the legislature, a bill providing for just the class of inspection discussed by the speaker last upon the floor, was killed in the Assembly by a vote of 43 to 34.

Secretary: Without groans.

Senator Hoyt: Without groans and without the loss of a tear—simply and wholly due to the two facts, first of all, ignorance, and second—I may class it as ignorance also—I guess it is only one classification after all—the very effective effort on the part of the Christian Scientists to down the proposition. While we are passing, simply inert, doing nothing to that end, we may say—in a comparative way—that element of thought in the state of Wisconsin, let me assure this body, is exceedingly active and very instrumental and has been, not only this session, but in the session two years ago, in killing measures of like important effect and this one in particular. It went down in defeat in response to the efforts put forth by Christian Scientists in the state of Wisconsin to kill it. They are very effective. They have methods that are not used by this body or any like body in the state of Wisconsin, that are exceedingly effective. They bill the legislature and procure results, and they will proceed in the next session to do the same act unless this body is active to an extent to which it easily may be, or other bodies in similar organizations.

Dr. Fred J. Gaenslen, Milwaukee: I was glad to hear Dr. Sheldon dwell on the importance of the economic aspect of this subject. It is true that children not in good health cannot keep pace with the average pupil at school, and some of these as a result are likely to become more or less a charge on the state.

The open air schools which Dr. Barth is working for should have been a feature of our school system long ago, and I hope he will in time be successful in his efforts to have such schools.

In the work in the Children's Hospital where we see much bone tuberculosis in all forms, the question arises when we have the children in shape to be taken home, "what will be the result if they are removed from our supervision." It has frequently happened that the cases come back in not nearly as good condition as when they left the hospital, because the parents in spite of instruction, will not have them live out doors. If we had a school, an open air school, where those cases of bone tuberculosis could be sent, and where those children could be instructed in the open air, where their minds could be kept active, it would be a great help, and institutions now filled with cripples could largely be dispensed with. In that respect alone the saving to the state would be considerable.

One other point which may be brought forward is that if the state makes education compulsory up to a certain age, it must provide, as has been said before, for suitable hygienic surroundings in the schools. The point of greatest importance, no doubt, is that of contagion, to prevent the spread of contagious diseases.

There is another point which impresses me rather forcibly from the orthopedic standpoint, and that is the seating. In every class you will find different sizes of children, and to crowd all these children into seats of the same size seems absurd. To put an overgrown child into a seat intended for a smaller one, produces round shoulders and scoliosis; there is less thoracic space, and the action of the heart and lungs is impaired. If in each classroom there were a certain number of adjustable seats, it would be of great benefit to those of abnormal development.

Last winter I had the good fortune to listen to our distinguished guest, Dr. Goldthwait, when he spoke about "poise," dwelling particularly on the point that an individual can do his work to better advantage with his body in proper position; with the head erect, and the shoulders thrown back, adequate breathing space is assured. This is an important factor in preventive medicine, and one which deserves special attention in the schools.

Dr. John M. Beffel, Milwaukee: It seems to me that if the question of medical inspection is logically developed, and we hold that the state should step in and inspect the child, say, after six years of age—the time to begin is at the beginning of life or shortly thereafter; here is where the state should begin its work and not wait till the child is five or six years old. We have wasted an enormous amount of energy in paying little or no organized attention to the child from the time it is born until it has entered school, and it seems to me we may better start at the beginning of life rather than 6 years afterwards.

In this country with 1,400,000 births each year, we have over 280,000 deaths in children under 5 years—of this number 36 per cent and over are

due to diarrheal diseases, and a great share of these you know are practically preventable. Approximately 20 per cent die as the result of so-called congenital debility, conditions which might have been prevented had we paid any attention to the matter previous to the birth of the child, or had we paid any attention whatever to controlling conditions which surround the birth of the child. Again we find that about 18 or 19 per cent of the deaths are the result of respiratory diseases which we could very easily control if we had but some means of getting in touch with this child and could follow it up from the time of birth.

The state sees fit to control the child so far as contagious diseases are concerned, and yet of this 280,000 who died under 5 years of age, you will find that less than 8 per cent died from the acute contagious diseases, and still we pay the most attention to this particular class of cases of morbidity and mortality; when over 50 per cent of morbidity and mortality are the result of diarrheal diseases and pulmonary diseases. These are things to which we should pay attention in contradistinction to others. That cause which results in 8 per cent of deaths is of no more importance than the one that causes 50 per cent. If it is logical that the state should appoint inspectors of all kinds and throw safeguards around the child against the development of these contagious diseases, it is certainly logical that the state should throw safeguards around the child to prevent the 50 per cent of deaths occurring from diarrheal and pulmonary diseases, under the age of five.

As far as tuberculosis is concerned it is responsible for but a small percentage of these deaths—not more, than 2 per cent, as shown by the most careful statistics.

So let us get back to the birth of the child; if it is the function of the state to supervise the child from the time it is born, medical inspection should start there. Any well-organized system of medical education in the state should start before the child is born, with the mother. You train the young woman for every occupation except motherhood, and the young man for every occupation except fatherhood. We are content to let the matter rest with nature, and nature has not endowed either of them with knowledge as to how to take care of the child, and in a few months after birth it is very likely wafted rapidly on the waves of preventable disease toward eternity.

Let us start our work by teaching mother and father the lesson of the great functions of fatherhood and motherhood, and then get hold of the child immediately after birth.

The child is a child of the state and belongs to the state in every way, and the state is entitled to everything which that child may bring into the world, and when you consider what children have brought into the world in the past—all the great men and women of the world who have come in this same way—we cannot say in regard to any particular child that is born that it is of no value to the state—how do you know but what a savior of the world is among the innocent children slaughtered as the result of the apathy and indifference of the public? Let us start with the new-born child and throw around it every safeguard that it is possible for an intelligent state to throw around childhood, in order that the state may keep that child in perfect health from the moment it is born and watch over it day after day especially during the first year, and demonstrate if it is not possible to save 50 per cent of the

lives that are at present sacrificed as the result of our apathy and indifference. I believe it is not too much to hope that if we observed each child and through some system of inspection followed it through the first year of its life, that before the year was over we could demonstrate that it is possible to save 50 per cent of those who are now sacrificed; and so I say, let us start our medical inspection early with the education of the mother and father, and then with the control of the new-born babe. (Great applause.)

DR. BARTH: The educational act of England of 1908 gives the educational authorities power to go into the homes and take charge of the diet, clothing and everything pertaining to the child, from the age of 3 years old on.

DR. BEFFEL: As a result the death rate in the city of London is lower than in Milwaukee. In Milwaukee it is 13 per cent of all babes before one year, and in London only 11 per cent.

DR. BARTH: Last month there was a full system of medical inspection in 377 cities in the United States, 75 per cent of which were under the Board of Education.

In respect to the other feature which I could not touch, infectious diseases, the following figures are interesting:

Contagious diseases found in the schoolroom this last school year:

Diphtheria 4, scarlet fever 27, measles 42, mumps 214, chicken pox 89, pertussis 28, acute tonsillitis 52, contagious contact 127.

That shows what damage might or can be prevented by careful inspection. These cases were all immediately isolated, the school room disinfected, and the other children thus protected.

PRESIDENT: I feel that Dr. Jones is to be congratulated on bringing out this valuable discussion. Dr. Jones will close the discussion.

DR. JONES (closing): I think Dr. Barth has probably educated the people of Milwaukee, judging from the figures read, but I think that in proportion to the number of children examined, we have him beaten with respect to the number of cases discovered, for we found 13 scarlet fever cases attending school at the time of desquamation and 85 cases of tonsillitis! All we can claim is that we have educated the people of Wausau to a certain extent. The people of Wausau are not below the average in intelligence, although I remember an instance which would indicate that they were. One of the inspectors sent a child home with a card stating that the child had hypertrophied tonsils, and the next day the father sent an indignant note to the teacher saying he didn't know of the child being bitten by any dog and did not know of any hydrophobia around there anywhere. (Laughter.)

We have gotten a good start with our one year's work, and do not claim anything more.

## CLINICAL DEPARTMENT

# PROLONGED CESSATION OF RESPIRATION—RECOVERY—CASE REPORT.

S. M. MORWITZ S. B., M. D.,

INTERNE IN THE MILWAUKEE COUNTY HOSPITAL.

Complete cessation of natural respirations for one hour and twenty minutes with recovery is of very infrequent occurrence. A search through the literature did not reveal a case of this character. However, the writer recollects in his perusal of periodicals and medical journals during the last few years, reading of operative cases in which respiration ceased and artificial respiration was instituted for hours. The patients did not recover. These cases were as a rule brain tumors particularly of the cerebellum. In a personal communication the writer is informed of two cases of cerebellar tumors which were operated in the Johns Hopkins Hospital and kept alive with artificial respiration for about twelve hours. Exitus occurred in both cases. Dr. Schäfer in his admirable essay "On Artificial Respiration" printed in The Harvey Lectures, 1907-1908, writes that in his experiments with dogs if he allowed more than two minutes to elapse after natural respiration had ceased, he always failed to obtain recovery even if the heart was still beating. Since the case to follow presents a number of interesting features it will be taken up in its entirety.

Case: G. S., Hospital No. 9794, a white male, aged 45, laborer, an Armenian, was admitted to the Milwaukee County Hospital, July 3rd, 1911, complaining of pain in the stomach and over the lower dorsal spines, vomiting and obstinate constipation. On entrance he appeared considerably emaciated and very weak, requiring support while walking a few rods from the ambulance to the wards. His pulse was 88, regular, of small volume, temperature 98.6° F., respirations 20. The following history was obtained through an interpreter: The patient's family and personal history are uneventful. Present complaint: This began six months ago with pain in the epigastrium and left hypochondrium and later in the back over the 7th to 10th dorsal vertebrae. This pain is of a gnawing character and is most pronounced one or two hours after eating. The taking of food or of soda relieves the pain. He has had persistent vomiting since the onset of his trouble. The vomiting occurs a few hours after his meals, usually after dinner and supper. The vomitus was never bloody or fecal in character. His bowels are obstinately constipated. Catharties have no effect while enemas expell a few small, thin stools. Urination

is not frequent or painful. He has lost a good deal in weight but does not know the amount; also he has become very weak and unable to move about. He has no headache, cough, or sweats.

Examination: Outside of the marked degree of emaciation the head, neck, and thorax were negative. The abdomen was retracted, the belly wall devoid of fat, and the liver dulness normal. The lower border of the stomach extended four fingers-breadth below the umbilicus upon inflation with air. No definite tumor mass was palpable at the pylorus nor in any other part of the abdomen except a probable enlargement [illegible] of the belly wall by light tapping with the tips of the fingers peristaltic waves travelling from left to right were elicited. There were no herniae at the inguinal rings; and the inguinal glands were palpable. The genitals and extremities were negative.

Gastric contents: A stomach tube was easily passed into the stomach and 1200 c.c. of a brownish yellow material of a strong garlicky order was removed. Analysis of the contents showed free HCl. .12%, total acidity 23, blood negative with guaiac and benzidene tests. The next day the stomach tube was again introduced and about one litre of a similar smelling material obtained.

Although no tumor mass was palpable, it was evident that the dilatation of the stomach and the retention of food was due to a stricture of the pylorus. The patient was then transferred to the surgical wards for a gastrojejunostomy. Before being taken to the operating room, he was given subcutaneously strychnine sulphate gr. 1/30, and morphine gr. ¼ and atropine sulphate gr. 1/150.

Operation: Dr. Tisdale, surgeon; ether anesthesia employed. A median line incision from the ensiform process to the umbilicus was made. The stomach was exposed and the pylorus was found to be contracted to the size of a lead pencil. No tumor mass was palpable. A probable gland enlargement was palpable behind the peritoneum. The first part of the jejunum was pushed through a vessel-free area in the mesocolon and brought in apposition with the posterior aspect of the stomach. Clamps were applied, and the first line of sutures begun when the patient's respirations ceased. The facial and radial pulse became barely palpable. The administration of ether was stopped and a subcutaneous injection of strychnine sulphate gr. 1/30 immediately given. After a few futile attempts to promote respiration by intermittent firm pressure against the ribs, the exposed organs were replaced into the abdomen and the wound well protected with sterile towels. The head of the patient was lowered over the end of the table, the tongue drawn forwards, the fauces cleared, and artificial respira-

tion begun. Sylvester's method was employed. The arms were grasped at the wrists and drawn upwards above the patient's head so as to expand the chest through the action of the pectoralis major muscles. This position was maintained a couple of seconds and then the arms were lowered to the side and pressed firmly against the ribs to produce a forcible expiratory act. The arms were then again elevated and the same cycle repeated and kept up at about fifteen times per minute, the normal rate of respiration. Thus, for one hour and twenty minutes (from 8:45 A. M. to 10.05 A. M.), artificial respiration was continued until the first signs of natural respirations were noted. In the interim, three doses of strychnine gr. 1/30 and lastly atropine suphate gr. 1/100 were injected subcutaneously, intervals of about twenty minutes lapsing between the injections. During the period of respiratory failure, the patient did not even make a gasp while the heart sounds remained fairly regular, of medium volume, and about normal in rate, the strychnine no doubt influencing the heart center. As the patient was in a very precarious condition it was not deemed advisable to continue the operation, so the abdominal incision was closed with a few interrupted silkworm sutures.

The patient was quickly returned to his bed and the treatment for surgical shock instituted. The respirations continued slow and irregular. During the next twelve hours, they registered between 7 and 12 per minute. The next day they varied from 12 to 16 per minute and were still somewhat irregular. Heart stimulants were given every three hours. The patient was now put on nutrient enemas. After one week, he was in a sufficiently good condition to warrant the completion of the operation, for it was essential to do a gastrojejunostomy and thus give the patient a better opportunity to recover.

Operation concluded: As the patient was not a very good surgical risk, no general anesthetic was used. A subcutaneous injection of morphine suphate gr. ¼ and atropine gr. 1/100 was given prior to the operation. The wound was reopened and an anastomosis between the stomach and jejunum made. In attempting to sew up the peritoneum the patient experienced so much pain, although gr. ⅛ and gr. ¼ doses of morphine had been added, that the abdominal incision was merely closed with interrupted silkworm sutures notwithstanding the possibility of a subsequent ventral hernia.

The respirations once more became exceedingly slow and for the next few hours averaged about 6 per minute. However, they gradually increased so that by the next day they were normal in rate and character. The patient now began to improve rapidly. His appetite became voracious and he continually requested more to eat although he

was getting more food than the average healthy patient in the ward receives. His weight increased 18 lbs. during the first month after the operation.

The only sequela resulting from prolonged artificial respiration was a partial paralysis of the left deltoid muscle causing partial limitation of motion at the left shoulder joint. It is surprising that only a paralysis of such small extent followed. At the time of writing, two months after the operation, the patient is in very good condition. He walks about and does light work in the ward. His weight is 139 lbs., a gain of 27 lbs. since his admission to the hospital. His temperature, pulse, and respirations are normal; red blood cells 5,600,000 per c.cm., white blood cells 7,600, hemoglobin 82, and his blood pressure is 128 m.m. Hg. His appetite is still voracious and his bowels act daily; he occasionally has recourse to cathartics. He has recovered the use of the deltoid muscle which had remained paralyzed for six weeks. A well formed scar marks the line of incision in the abdomen.

Summary: This case illustrates a few very interesting points. In the first place, to the writer's knowledge it is the first case of its kind recorded. Again, it upholds Dr. J. F. Mitchell's contention (J. A. M. A., Aug. 26, 1911) that there is a distinct contrast in the sensibility of the parietal and visceral peritoneum, a subject first worked out and published by Lennander. The parietal peritoneum is intensely sensitive to pain while the visceral peritoneum and the abdominal organs are not sensitive to pain. It was noted in the case report that during the manipulations within the abdomen the patient remained perfectly quiet. However, when an attempt was made to sew up the parietal peritoneum, the patient experienced such intense pain although two more doses of morphine were given, that the abdominal incision was simply closed with a few interrupted silkworm sutures. Finally, this case teaches that hope for recovery should never be given up as long as the heart beats; and that one should not be guided by any specified time allotted in such cases by some surgeons. For instance, Rose and Carless state in their Manual Of Surgery that attempts at resuscitation should be continued for one-half to three-quarters of an hour.

I wish to thank Dr. L. M. Warfield for the permission to report this case and for his aid in the preparation of the report.

# WISCONSIN MEDICAL JOURNAL

OFFICIAL PUBLICATION OF THE STATE MEDICAL SOCIETY OF WISCONSIN.

A. W. MYERS, M. D., Editor.
141 Wisconsin Street, Milwaukee.

J. P. McMAHON, M. D., Managing Editor.
141 Wisconsin Street.



Publication Committee:

A. J. Patek, M. D., Milwaukee.
O. H. Foerster, M. D., Milwaukee.
G. E. Seaman, M. D., Milwaukee
C. S. Sheldon, M. D., Madison.
S. S. Hall, M. D., Ripon.

Collaborators:

The Council.

M. R. Wilkinson.....Oconomowoc
G. Windesheim.....Kenosha
F. T. Nye.....Beloit
W. Cunningham.....Platteville
J. V. Mears.....Fond du Lac
H. W. Abraham.....Appleton
Edward Evans.....La Crosse
T. J. Redelings.....Marinette
O. T. Hougen.....Grand Rapids
R. U. Cairns.....River Falls
J. M. Dodd.....Ashland
H. E. Dearholt.....Milwaukee



Annual Subscription. - - - $2.00. Single Copies, - - - - - $0.20

Address all business communications to
WISCONSIN MEDICAL JOURNAL,
504 Goldsmith Building, Milwaukee.

[Entered as second class matter, June 30th, 1903, at the Post Office at Milwaukee, Wis., under Act of Congress, March 3rd, 1879.]

Vol. X. NOVEMBER, 1911. No. 6


## EDITORIAL COMMENT.

### THE NEXT MEETING

The dates for the next meeting of the State Medical Society of Wisconsin have been fixed for Wednesday, Thursday, and Friday, May 22, 23 and 24, 1912.

Wausau is one of the most progressive cities in the State, and we are going to have such a good time there that every member of the Society who stays away from this meeting is going to regret it as long as he lives.

Put the dates in a conspicuous place on your desk and make your plans accordingly.

## MEDICAL INSPECTION OF SCHOOLS

The subject of the medical inspection of schools is one of such importance in every community that all our readers will do well to peruse with care the article by Dr. Jones of Wausau on this subject in the November Journal, together with the interesting discussion which follows it.

The bill encouraging medical inspection was defeated in the last session of the legislature through the active efforts of the Christian Scientists who sent a large delegation to appear at the Committee hearings on the bill and by their united front gave the appearance of a much more wide-spread opposition than really exists.

The medical inspection of schools is not a thing in which the medical profession is interested from a selfish point of view; there is no money in it. Some salaries are paid but at this stage they are quite sure to be absurdly small in proportion to the work required. But in this matter, as in so many others connected with preventive medicine, the need for positive action is more keenly appreciated by the medical profession than by any other group of citizens. For this reason the medical profession must be acquainted with the situation and must take the lead in stirring up general interest in the subject.

It cannot be expected that any large number of physicians will be able to attend the Committee hearings on this bill when it comes up again, but it ought to be one of the functions of the Committee on Public Policy and Legislation of the State Medical Society to see that the medical profession is properly represented at these times.

## MEDICAL BENEVOLENCE

In 1857 there was organized in Boston, the Massachusets Medical Benevolent Society, having for its purpose, as the name suggests, the aiding of distressed, worthy physicians and their widows or orphans if in destitute or indigent circumstances. A fund was gradually raised from private individual donations and life membership fees, the income of which is used in charitable relief.

The Society now has an income from dues and investments of about $4,000 a year and has to-day twenty-two annuitants. These beneficiaries are the widows and children of deceased doctors in needy circumstances or doctors who are deserving of financial assistance. Some money is also spent for the temporary aid of the same class of persons.

The very ready and generous response made a few years ago by the members of the State Medical Society to an appeal for financial

aid in the case of an aged member of the organization will be remembered by all. Cases of this kind are not rare but as there is no machinery for their relief they are not always discovered and in consequence much suffering results.

The response to the former appeal shows what could be done. Would it not be well to begin in a small way to accumulate a fund for this purpose, not by increasing the dues of the State Medical Society, but by receiving voluntary subscriptions to be set aside for this special purpose. It could be administered through the treasury of the State Society at practically no expense.

From the nature of the work of the physician there must always be need of aid of this kind and the sooner a start is made the better for all.

It is respectfully suggested that a consideration of this subject be undertaken at the next meeting of the Society.

## PRIZES AND SCHOLARSHIPS

The College of Physicians of Philadelphia announces that the next award of the Alvarenga Prize, being the income for one year of the bequest of the late Senor Alvarenga, and amounting to about one hundred and eighty dollars, will be made on July 14, 1912, provided that an essay deemed by the committee of award to be worthy of the prize shall have been offered.

The Alvarenga Prize for 1911 has been awarded to Dr. Francis D. Patterson, of Philadelphia, Pa., for his essay entitled, "The Parathyroid Glandules."

Surely it is permissible to wish to leave a more enduring monument than marble in the world in which we have lived and worked and sorrowed and rejoiced. And what pleasanter way of achieving immortality is there for those of us who are not endowed with the genius of a Pasteur, a Koch, or a Billroth than that of the late Senor Alvarenga whose far-sighted generosity is brought to the minds of thousands of medical men annually by the announcement of these prize contests?

Senor Alvarenga's bequest was a modest one, but who can estimate the breadth of its influence as a stimulus to the medical men of to-day and of future generations, for we all have enough of the sporting spirit in our veins to make us willing to work a little harder for a prize or in a contest than under ordinary conditions.

Few of the members of the medical profession grow rich but even a man in moderate circumstances could afford to obtain this

splendid form of remembrance by establishing a prize fund or a scholarship of some kind, and the State Medical Society of Wisconsin has shown stability enough to make it a safe and worthy custodian of a trust of this character.

A genuine loyalty to our chosen profession and a sincere interest in its continued advancement could find no better manner of expression.

The effect of such a stimulus on the character of the work done by the members of the State Medical Society would be felt in every county in Wisconsin, and felt not for one season, or for one generation, but for all time.

---

## IN MEMORIAM.

### Dr. M. W. Dvorak.

*A Tribute.*

On October nineteenth, Dr. M. W. Dvorak died at St. Francis Hospital, La Crosse, of typhoid fever.

Only thirty years of age, Dr. Dvorak had already won for himself a high place in his profession, while his prospects for future advancement and success were most promising.

He graduated from the College of Physicians and Surgeons, Chicago, in 1903, and served as interne at St. Francis Hospital, La Crosse, the succeeding year.

Struck by his ability to work, his desire for scientific investigation, his diagnostic acumen, his gentlemanly bearing, and his genial, dignified treatment of patients, the writer took him as his associate, and for the succeeding seven years, to the time of his death, enjoyed him, and esteemed him.

None of the young men of the state contributed papers to the State Medical Society oftener than did Dr. Dvorak; none contributed abler or more stimulating papers.

At the time of his death his desk was full of notes on many subjects, gathered from a large clinical field, and digested and classified with ripe judgment and rare knowledge. His modesty prevented frequent appearance in print, but his active, untiring mind compelled the preparation of much material of real value.

He had trained himself to habits of daily intellectual pursuits. No day's practice was ever so busy, no day's labor so wearisome, that before retiring he did not do some real study, or some solid reading.

On the road, or in the railway coach a pocket edition of some favorite author always accompanied him.

His medical library, both in standard authors and in current literature was well selected and full. His non-medical library showed best, perhaps, his cultured, serious, philosophic turn of mind; not a book in it but he knew, not a book but he loved, for none other would he have amongst those he called his best friends.

In seven years of close association I never knew a moment wasted nor an hour idly spent except in much needed, sorely grudged recreation; and this latter he got mostly by going to eastern clinics, spending his spare time in old book stalls, on the sea shore, or in hearing grand opera of which he was passionately fond, being a lover of music and no mean performer on the piano and other instruments.

In 1908, with the writer he spent several months abroad, and fairly revelled through Europe; its history, scenery, music and art galleries fairly captivating him.

He did an enormous amount of work. Day and night were alike to him when the sick called; the poor quicker than the rich got his best effort and readier response.

Amid it all the scientific temperament was never dulled. Each case was a problem for solution. Hence he was ever becoming better equipped and more able in his work. Loving surgery, possessed of genuine manual dexterity, and endowed with rare good judgment he was sure to have gone far and high in this field. Had he been spared the thirty years we might well hope were yet before him he must have risen high in honor and distinction.

Clean as a virgin, manly as a knight-errant, gentle, always just, dignified, he was honored and respected by all and dearly loved by his patients. Never had a young man earned greater respect than had he in his community; never was greater or more loving tribute paid to a dead son of La Crosse. But the greatest tribute paid him was witnessed as the funeral cortege passed the humble cottage of a former patient, and the woman occupant, aged, alone, almost blind; stood weeping at the open door.

E. Evans.

## NEWS ITEMS AND PERSONALS.

**Dr. Rinehart,** Ashland, who has been seriously ill, is improving.

**Drs. S. W. and J. C. Doolittle** have formed a partnership at Fennimore.

**Dr. E. P. Kermott,** Hudson, is in New York City taking a post graduate course.

**Dr. G. C. Waufle,** Janesville, who recently underwent an operation for an internal abscess has recovered.

**Dr. F. J. Antoine,** Prairie du Chien, has returned from New York where he took a course in post-graduate work.

**Dr. E. P. Crosby,** Arnott, suffered a compound fracture of the right leg, the result of a kick from a horse, Oct. 20.

**The Milwaukee County Poor Trustees** have chosen Dr. A. F. Young, chief county physician; assistants Drs. L. F. Klemm, W. F. Lochemes, C. A. Fidler, J. H. Rohr and T. P. Grogan.

**Dr. C. J. Wallace,** formerly located in Superior and now at New Duluth, has been appointed surgeon for the new steel plant being built by the Minnesota Steel Company on the St. Louis River.

On complaint of attorney A. C. Umbreit, representing the **State Board of Medical Examiners,** Gottfred D. Glaus and Emil R. Binte, both of Milwaukee, have been arrested on the charge of unlawful practice of medicine.

**Dr. John L. Montgomery,** Eau Claire was the victim of two accidents on Oct. 30. While chopping a piece of wood the blade slipped, severing the right forefinger. At the same time he lost his balance and fell breaking two ribs.

The proposal of the County Board to establish a new county hospital in the center of Milwaukee and discontinue the present hospital at Wauwatosa, was endorsed on Oct. 31, by a joint meeting of the committees on municipal sanitation and public affairs of the Merchants and Manufacturers Association. The committee also favored converting the present county hospital building into a tuberculosis sanatorium.

**The Bulletin of the Medical History Society of Chicago,** Vol. 1, No. 1, October, 1911, contains an interesting article by Howard A. Kelly on "Some American Medical Botanists," and a number of other essays mostly bearing on the early history of Medicine in and around Chicago. The Society is to be congratulated on the excellent appearance of its Bulletin and also on its courage in taking up this pioneer work. A statement of its aims and needs is published on another page of this issue of the Journal.

**Special Study of Pellagra.** The Department of Tropical Medicine of the New York Post-Graduate Medical School is organizing an expedition to investigate Pellagra in the Southern States. The work will start in the Spring and is made possible by the gift to the Institution for this purpose of $15,000.00 by Col. Robt. M. Thompson and Mr. J. H. McFadden.

New laboratories, completely equipped for post-graduate medical instruc-

tion and research, have been organized and opened at the **New York Post-Graduate Medical School and Hospital.** The director is Jonathan Wright, M. D., and the staff includes: Tropical Medicine, in collaboration with the medical departments of the Army and Navy: James N. Phalen, M. D., Capt. Med. Corps., U. S. A., Francis M. Shook, M. D., P. A. Surg., U. S. N.; Bacteriology: Ward J. McNeal, Ph. D., M. D., Richard M. Taylor, M. D.; Pathology: Ward J. MacNeal, Ph. D., M. D., Oliver S. Hillman, M. D.; Biochemistry: Victor C. Meyers, Ph. D., Morris S. Fine, Ph. D.

**Marriages.** Dr. D. Webster Lynch and Miss Elizabeth Shinners both of West Bend, Oct. 30.

**Removals.** Dr. C. J. Rollefson, Chippewa Falls to Superior.

Dr. G. H. Schlenker, Gilman to Manitowoc.

Dr. H. C. Hubbard, Grand Rapids to Merrill.

Dr. Kerner, of Berlin, will remove to Pine River to assume the practice of Dr. Williams. Dr. Kerner has disposed of his practice at Berlin to Dr. Forest Parsons, of Alliance, Neb.

Dr. F. E. Ellison, Chicago, has purchased the practice of the late Dr. I. Buckeridge, at Beloit.

Dr. E. T. Ridgeway, Red Granite, has disposed of his practice to Dr. G. A. Steele, of Milwaukee, and after a trip to Texas will return to Wisconsin and resume practice in a northern city.

Dr. W. L. Wentzel, of Milwaukee, has removed to Stoughton, where he has purchased the practice of Dr. C. E. Hildreth, who retires on account of ill health.

**Deaths.** Dr. M. W. Dvorak, one of the prominent and capable of the younger physicians of La Crosse, died on October 19th, after an illness of two weeks of typhoid fever, aged 30 years.

Matthew W. Dvorak was born in La Crosse in 1881. In his boyhood he attended St. Wenceslaus Parochial School, and at the age of 13 entered Calvary Academy at Fond du Lac. Later he attended the University of Illinois. He graduated from the College of Physicians and Surgeons at Chicago in 1902. He then took a course of post graduate work at Johns Hopkins University, Baltimore. Dr. Dvorak then returned to La Crosse and served as interne at the St. Francis Hospital for one year. For the past eight years he had been associated with Dr. Edward Evans at La Crosse.

Dr. Dvorak was a member of the La Crosse County and State Medical Societies.

Dr. C. H. Weaver, Glenbeulah, formerly of Sheboygan, died on October 23rd, aged 72 years. Dr. Weaver was First Assistant Surgeon General during the Civil War, being stationed at Philadelphia. He practiced for a time at Syracuse, New York and then went to Washington. While there he was taken ill and lost his hearing.

Dr. Daniel B. Wyatt, one of the best known physicians of Fond du Lac, died on October 27th at the age of 76 years, of arterio-sclerosis.

Daniel B. Wyatt was born on February 21, 1835, in Stukley, Canada. A few years later his parents removed to Franklin County, New York, where Dr. Wyatt was educated and lived until 1868, when he moved to Fond du Lac,

where he practiced 43 years. Two years ago Dr. Wyatt was compelled to retire because of ill health. Dr. Wyatt was graduated from the Medical Department of the New York University in 1862.

Dr. L. Breitzman, of Sheboygan, formerly of Menasha, died on November 5th, at the Northern Hospital at Winnebago, where he had been confined two years.

Dr. Breitzman graduated from a medical college at Louisville, Ky., at the age of 19. He then went south locating in Florida, but later returned to Chicago. He also practiced for a time at Sheboygan and Menasha.

Dr. G. W. Roberts, one of the leading practicing physicians of Green County, and a resident of Albany for many years died on November 8th, at the Madison Sanitarium, where he underwent an operation for an abscess below the knee. It is thought blood poisoning, which developed after the operation, caused his death.

Dr. Roberts' death brings to a close forty years of continuous service as a physician in Green County, where he had built up an extensive practice. He was born in Bennington, Licking County, Ohio, on April 10, 1841, and emigrated to Rock County with his parents at the age of three years. Completing a common school education he spent four terms at Milton College, and in the spring of 1854, commenced the study of medicine under Drs. Barrows and Treat of Janesville. The year after he attended the Chicago Medical College and took chemical instruction at Mercy Hospital. He commenced the practice of medicine at Albany in 1867, being a partner of Dr. Winston. The following fall he went to school at Rush Medical College, returning to Albany upon graduation.

He was a member of Green County and the State Medical Societies.

**The Society of Medical History of Chicago.** As time passes the value of collections of an historic character becomes more apparent. In this country collections of general historic materials are being formed in many places both in the East and West. The preservation of objects having an historic interest in connection with medicine has been largely neglected in the West until recently, when it has been taken up actively, especially in St. Louis and Cincinnati. Objects which have been cherished by the individual are often lost or destroyed after he has passed away.

With these facts in mind the Society of Medical History of Chicago was organized, and it has already secured a nucleus for what promises to become a valuable collection. The purpose of the Society is to systematically collect and permanently preserve any materials which are or will become of interest in connection with the medical history of institutions, organizations and individuals, especially of the central and western regions. With its central location this collection will be easy of access to everyone doing research work in medical history which the Society desires to encourage. Suitable arrangements have been made for the care of the collection in a fire-proof building.

Some of the things which are desired for this collection are:

Medical books printed in the West.

Reprints of medical articles written in the West.

Biographies and histories of medical organizations and institutions in the form of books, pamphlets and manuscripts.

Western medical journals published prior to 1880.

Catalogues, announcements, diplomas, graduation programs, student note books, etc., of the various medical colleges of all "schools."

Official reports, etc., of all medical institutions, including hospitals.

Official reports and publications of medical societies, including programs of meetings.

Official reports and publications of boards of health.

Various issues of medical directories.

Prescriptions of old date.

Photographs, pictures, etc., of buildings and individuals.

Manuscripts, and autograph letters of physicians.

Instruments, medals, etc., of historic interest.

Objects of special interest because of their association with certain individuals or events.

Anything which has a medico-historical value from any source.

Old medical books, of any kind.

The Society realizes that its purpose can only be accomplished through the co-operation of a great many physicians, their families and descendants. It invites the active aid of everyone who has a personal or family pride in the history of medicine, and solicits the donation of such medical books and journals in libraries of living or deceased physicians as would be suitable for preservation by the Society.

In each case gifts will be duly credited to the donors.

In order that private medical libraries may be disposed of to the best advantage, advice will, upon request, be furnished regarding the sale of more recent medical books and journals.

All communications should be sent to Dr. George H. Weaver, Secretary, 1743 West Harrison Street, Chicago.

---

## BOOK REVIEWS.

**A Manual of Practical Hygiene.** For Students, Physicians and Health Officers, by CHARLES HARRINGTON, M. D., late Professor of Hygiene in the Medical School of Harvard University. Fourth edition, revised and enlarged by MARK W. RICHARDSON, M. D., Secretary to State Board of Health of Massachusetts. Octavo, 850 pages, with 124 engravings and 12 full-page plates, in colors and monochrome. Cloth, $4.50, *net*. Lea & Febiger, Philadelphia and New York, 1911.

Dr. Harrington's book needs no introduction to the profession. It is too well known and has enjoyed always a deserved popularity.

The present (4th) edition is issued as a posthumous work revised in great part by Dr. Mark W. Richardson, one fully competent to undertake the task. The sudden death of Dr. Harrington at a time when he was revising his book for a fourth edition made it necessary for someone to complete his unfinished labor.

The book has been brought up to date, such subjects as Water; Disposal of Sewage, Habitations, Schools, etc., being especially valuable chapters. This is undoubtedly the most authoritative work on Hygiene and should have a

place on the shelves of the libraries of every member of the profession. The subject of Preventive Medicine is, at present, assuming the place which it long ago should have assumed, and a book such as this one is not only an introduction to the subject, but a compend of much information bearing directly upon this branch of medicine.

The publishers have given us an attractively bound and well-printed book. The index of subjects has been carefully prepared.—L. M. W.

---

**One Hundred Surgical Problems.** By JAMES G. MUMFORD, M. D., Octavo, 354 pages. Price $3. W. M. Leonard, Boston, Publisher, 1911.

Dr. Mumford's work here noticed is neither a text-book on surgery nor a surgical monograph, but rather, as explained on the title page, a "dissection and explanation of the experiences of daily practice." To compare clinical histories with operative or autopsy findings, to see as does the operating surgeon the conditions corresponding to a given set of symptoms, to thus study the pathology and anatomical relations of living structures and so to confirm or correct one's diagnoses—all this makes experience useful and valuable. Surgical *principles* must be taught and surgical principles must be learned, but it is just possible that in our recent surgical literature the fact has been too often ignored that much may be learned from a careful study of case histories. In Dr. Mumford's One Hundred Problems this phase of surgical teaching has been well and most entertainingly done. Each problem begins with the case history notes. Important or leading features in the symptomatology are emphasized by reference notes. These notes, which form the most valuable part of the book, are utilized by the author in a discussion of the symptoms found and explaining the steps by which a diagnosis is reached—then follows the treatment, surgical in most cases. The problems include a great variety of surgical cases: brain tumor, fractures of the skull, empyema, gastric and duodenal ulcer, gall stones, goitre, "cob-webs in the attic of the abdomen," the visceral ptoses, cancer, tubal pregnancy, hernia, syphilis, gonorrhea, fistula, fractures and others. To refer to cases of special interest is not necessary, although Case No. 59, may be noted as probably the same as the one referred to by Dr. Goldthwait in his Waukesha address: the case of a child with chronic anthritis, blindness, and prolapse of stomach and colon, treated and put well on the road to recovery by correction of the abdominal condition.

If one chooses to criticise it might be said that the case histories as given are sometimes unnecessarily full, but the story of the shriveled and neurotic farmer, the strident mother-in-law who held the floor, the fragile and timid veiled lady, the pathetic case of the Rev. John Aquinas, all exhibit the author's forceful and descriptive style of writing—it reads like a novel but is no fiction. The book has a good index and is illustrated with twelve plates of skiagraphs showing various displacements of stomach and colon.—B.

---

**Practical Medicine Series.** Vol. IV., series 1911. Gynecology. Edited by EMILIUS C. DUDLEY, A. M., M. D., and C. von BACHELLE, M. S., M. D., Chicago. Pp. 232. Price, $1.25.

Vol. V. Obstetrics. Edited by JOS. B. DE LEE, A. M., M. D., and HERBERT M. STOWE, M. D., Chicago. Pp. 233. Price, $1.25.

Vol. VI. General Medicine. Edited by FRANK BILLINGS, M. S., M. D., and J H. SALISBURY, A. M., M. D., Chicago. Pp. 353. Price, $1.50.

Vol. VII. Pediatrics. Edited by ISAAC A. ABT, M. D., and MAY MICHAEL, M. D., and Orthopedic Surgery, edited by JOHN RIDLON, A. M., M. D., and CHARLES A. PARKER, M. D., Chicago. Pp. 237. Price, $1.25. Price of the series of ten volumes, $10.00. The Year Book Publishers, 180 N. Dearborn Street, Chicago.

These volumes of a handy size and attractively arranged for the student and busy practitioner, are replete with suggestions of the best practice of the day. The material of the volumes consists almost entirely of abstracts of important recent articles, in each case giving the reference to the original article. The ground is covered with great thoroughness, so that these books present in condensed form what has been done during the year that is really good.

By means of this excellent series of books it is possible for the general practitioner to keep in touch with medical progress in all its directions, an undertaking which the growth of medical literature has rendered an impossibility without such an aid. The judicious editorship of the entire series and of the individual volumes eliminates most of the superficial and unsound in current medical literature and presents the articles of real value in a form full enough for satisfactory use.

For the busy general practitioner, who desires to keep moving with the current of progress this series will prove most helpful.

---

**The Fourth Physician.** By MONTGOMERY PICKETT. Illustrated by GORDON STEVENSON. A. C. McClurg & Co., Chicago, 1911. Price, $1.00.

Selfishness, like the poor, is always with us, but at times it appears in such a thorough disguise that a special revelation is required to enable us to recognize it. The temptation to build up a merely lucrative practice and to seek too keenly for scientific fame, thus losing sight of the humanitarian side of the practice of medicine, is well shown in a fervid though sincere little story of several physicians, an old Southern negro man servant, and the inevitable girl. How plodding unselfish Dr. Warren makes the too-popular Dr. Shepherd see the error of his ways and how he enters upon a life of real service is well told in "The Fourth Physician." The tale is pleasantly free from the surgical details so often dragged into modern medico-literary efforts, though there is, of course, the usual sentiment—"enough and too spare." The little book is refreshing in that it puts the physician before the reading public as a real man, and not as an ogre, a butcher or "a little tin god on wheels."

The story is based on a play which won first prize over eleven hundred others submitted in a recent contest.

---

**The Practitioner's Visiting List** for 1912. A pocket-sized book containing memoranda and data important for every physician, and ruled blanks for recording every detail of practice. The Weekly, Monthly and 30-Patient Perpetual contain 32 pages of data and 160 pages of classified blanks. The 60-Patient. Perpetual consists of 256 pages of blanks alone. Each in one

wallet-shaped book, bound in flexible leather, with flap and pocket, pencil with rubber, and calendar for two years. Price by mail, postpaid, to any address, $1.25. Thumb-letter index, 25 cents extra. Descriptive circular showing the several styles sent on request. Lea & Febiger, Publishers, Philadelphia and New York.

The text portion of the Practitioner's Visiting List for 1912 has been thoroughly revised and brought up to date. It contains, among other valuable information, a scheme of dentition; table of weights and measures and comparative scales; instructions for examining the urine; diagnostic table of eruptive fevers; incompatibles, poisons and antidotes; directions for affecting artificial respiration; extensive table of doses; an alphabetical table of diseases and their remedies, and directions for ligation of arteries. The record portion contains ruled blanks of various kinds, adapted for noting all details of practice and professional business.

---

**Diseases of the Stomach. With Special Reference to Treatment.** By Charles D. Aaron, Sc. D., M. D., Professor of Gastroenterology and Adjunct Professor of Dietetics in the Detroit College of Medicine; Professor of Diseases of the Stomach and Intestines in the Detroit Post-Graduate School of Medicine, etc. Octavo, 555 pages, with 42 illustrations and 21 plates. Cloth, $4.75, *net.* Lea & Febiger, Philadelphia and New York, 1911.

The literature of this subject is now so great and has grown so rapidly within the last decade that one is warranted in looking rather closely and critically for justification for the issuance of a new volume dealing with the same.

Such justification would require up-to-dateness in the discussion of the physiologic pharmacologic and pathologic problems involved, concise descriptions of diagnostic methods, and therapeutic procedures, and discriminating outlines of general management.

Viewed from this standpoint, the author has succeeded remarkably well in fulfilling the requirements and has produced, in convenient size, a volume which will serve the physician as a practical guide in the diagnosis and treatment of gastric disorders.

The newer problems in gastric physiology and pathology have been well and understandingly presented, and antilytic serums and bacterial vaccines have received due attention.—W. H. W.

---

**Recent Studies of Syphilis, with Special Reference to Sero-Diagnosis and Treatment.** Medical Symposium Series No. 1. Second Edition (Revised). A Reprint of Articles Published in the Interstate Medical Journal. Paper, 212 pp. St. Louis. Interstate Medical Journal Co. Price, $1.00.

"Cognizant of the importance of the subject of syphilis and the fact that but few American physicians had had access to the latest European literature, the editors of the "Interstate Medical Journal" deemed it advisable to issue a "Special Syphilis Number" for January with particular reference to serodiagnosis, and to treatment with the Ehrlich-Hata arsenic compound, dioxydiamido-arsenobenzol. The articles collected in the brochure appeared in the

special number, but, on account of the regular edition having been exhausted soon after publication, this volume is issued as a reprint with the addition of several allied articles published in October, 1910."

"Progress is never satisfactorily interpreted by one author, and for this reason it is thought that this volume, since it contains the opinions of a number of writers, will be the more serviceable to the profession."

A partial list of the papers and contributors to this remarkable collection will give an idea of the unusual value of the studies which are here presented in an attractive, convenient, and inexpensive form.

Syphilis of the Nervous System, by Ernest Jones, M. D.: On the Means of Finding the Spirochaeta Pallida with Reference to the India Ink Method, J. S. Cohn, M. D.; The History and Methods of Application of Ehrlich's Dioxydiamidoarsenobenzol, Lewis Hart Marks, M. D.; The treatment of Syphilis with Ehrlich-Hata "606"-Salvarsan, Abr. L. Wolbarst, M. D.; Syphilis and Pulmonary Tuberculosis, Robert H. Babcock, M. D., LL. D.; Recent Progress in the Treatment of Syphilis, H. Hallopeau, M. D.: Personal Observations with the Ehrlich-Hata "606" Remedy, B. C. Corbus, M. D.; The Public and Syphilis, Isadore Dyer, Ph. B., M. D.; Syphilis as a Cause of Pauperism, A. Ravogli, M. D.; The Sanitary Supervision of Prostitutes, Prince A. Morrow, M. D.; The Cerebrospinal Fluid in Syphilis and in Parasyphilitic Diseases, S. Strouse, M. D.; Serum Diagnosis of Syphilis, Carl Fisch, M. D.; Syphilis of Bone: X-ray Diagnosis, E. H. Skinner, M. D.; The Results of Salvarsan Treatment in Diseases of the Nervous System, Sidney I. Schwab, M. D.; Salvarsan in Opthalmology, John Green, Jr., M. D.

---

**Surgical Applied Anatomy.** By Sir Frederick Treves, F. R. C. S., Sergeant-Surgeon to H. M. the King, Late Lecturer on Anatomy at the London Hospital. New (6th) edition, thoroughly revised. Pocket size, 12mo, 676 pages, 137 illustrations, of which many are in colors. Cloth, red edges, $2.50, *net*. Lea & Febiger, Philadelphia and New York, 1911.

In the preface to the first edition of this work its distinguished author says of Applied Anatomy that "on the one hand it serves to give a precise basis to those incidents and procedures in practice that more especially involve anatomical knowledge; on the other hand it endues the dull items of that knowledge with meaning and interest by the aid of illustrations drawn from common medical and surgical experience. * * * * "The Student of Human Anatomy has often a nebulous notion that what he is learning will sometime prove of service to him; and may be conscious also that the study is a valuable, if somewhat unexciting, mental exercise. Beyond these impressions he must regard his efforts as concerned merely in the accumulation of a number of hard usassimilable facts. It should be one object of Applied Anatomy to invest these facts with the interest derived from an association with the circumstances of daily life: it should make the dry bones live."

How well the author has succeeded in the difficult task of making the dry bones live," all those who are familiar with this little volume will gladly testify. To the mind of the present reviewer no other book in this field approaches the work of Treves in either comprehensiveness or readability. There are few books on any branch of anatomy which can be picked up, opened at random, and read with interest and pleasure wherever chance has opened them; but this can be done with Treves.

Although the book is arranged in a systematic manner the subject is approached from the practical side in every part and the whole constitutes a veritable mine of useful information, interesting alike to practitioner, surgeon, or student.

The chief alterations in the new edition relate to the glands of internal secretion, to the lymphatic system, to the anatomy of the abdomen, and to new facts which have been discovered by the use of X-rays in examining the human body. Thirty-five new illustrations have been introduced, many of them in colors.

---

**Recent Studies of Cardio-Vascular Diseases.** Medical Symposium Series No. 2. A Reprint of Articles Published in the "Interstate Medical Journal." Paper, 216 pp. St. Louis, Interstate Medical Journal Co. Price, $1.00.

The broad and important field covered by the papers contained in this collection as well as their authoritative character is indicated by the following partial list of subjects and authors.

Recent Studies Upon the Electrocardiogram and Upon the Changes in the Volume of the Heart, Arthur D. Hirschfeldler, M. D.; On Chronic Endocarditis Regarded as Fibrosis of the Valves of Non-Infective Origin, J. George Adami, M. D., F. R. S.; Displacements of the Heart and Diaphragm together with disturbances in the Function of the Latter as Causes of Symptoms in Pulmonary Tuberculosis, Francis M. Pottenger, A. M. M. D., LL. D.; The Bearing of Old and New Facts Upon Our Conceptions of Cardio-Vascular Disease, Hobart A. Hare, M. D.; Arterial Blood-Pressure, Albert E. Taussig, M. D.; Surgical and Medical Shock, J. B. Gerstley, M. D.; Congenital Heart Disease, Alfred Friedlander, M. D.; The Role of the Myocardium in Heart Disease, Louis M. Warfield, M. D.; The Relation of Pregnancy and Labor to Cardiac Disease, Hugo Ehrenfest, M. D.; Treatment of Cardiac Disease in Childhood, Isaac A. Abt, M. D.; The Newer Heart Remedies, Wm. F. Boos, M. D., Ph. D., and C. H. Lawrence, Jr., M. D.

The Interstate Medical Jonrnal is to be congratulated upon the convenient form and attractive appearance of these volnmes as well as upon the valuable and interesting character of the contents.

---

# THE STATE MEDICAL SOCIETY OF WISCONSIN

ORGANIZED 1841

## Officers 1911-1912.

J. M. DODD, Ashland, President.

T. J. Redelings, Marinette, 1st Vice-President.

C. A. Armstrong, Boscobe, 2d Vice-President.

H. E. Dearholt, Milwaukee, 3rd Vice-President.

CHAS. S. SHELDON, Madison, Secretary.

S. S. HALL, Ripon, Treasurer.

ROCK SLEYSTER, Waupun, Assistant Secretary.

## Councilors.

TERM EXPIRES 1917.

1st Dist., M. R. Wilkinson, - Oconomowoc
2nd Dist., G. Windesheim, - - Kenosha

TERM EXPIRES 1912.

3rd Dist., F. T. Nye, - - Beloit
4th Dist., W. Cunningham, - - Platteville

TERM EXPIRES 1913.

5th Dist., J. V. Mears, - Fond du Lac
6th Dist., H. W. Abraham Appleton

TERM EXPIRES 1914.

7th Dist., Edward Evans, - - La Crosse
8th Dist., T. J. Redelings, - Marinette

TERM EXPIRES 1915.

9th Dist., O. T. Hougen, - - Grand Rapids
10th Dist., R. U. Cairns, - - River Falls

TERM EXPIRES 1916.

11th Dist., J. M. Dodd, - Ashland
12th Dist., H. E. Dearholt, Milwaukee

## Delegates to American Medical Association.

L. F. Bennett, Beloit. C. S. Sheldon, Madison. A. H. Levings, Milwaukee

## Alternates.

F. S. Wiley, Fond du Lac. Wilson Cunningham, Platteville. R. G. Savle, Milwaukee

## Committee on Public Policy and Legislation.

A. W. Gray, Milwaukee, Chairman. J. P. McMahon, Milwaukee. F. F. Bowman, Madison.

## Committee on Medical Defense.

G. E. Seaman, Milwaukee, Chairman. S. S. Hall, Ripon. A. J. Patek, Milwaukee.

## Committee on Prevention of Tuberculosis.

C. A. Harper, Madison. G. E. Seaman, Milwaukee. M. P. Ravenel, Madison
J. M. Beffel, Milwaukee. C. H. Stoddard, Milwaukee.

## Program Committee.

A. W. Gray, Milwaukee, Chairman.

## NEXT ANNUAL SESSION, WAUSAU, MAY 22, 23 AND 24, 1912.

The Wisconsin Medical Journal, Official Publication.

## LIST OF EXECUTIVE OFFICERS OF COUNTY MEDICAL SOCIETIES.

| County. | President. | Secretary. |
|---|---|---|
| Ashland-Bayfield-Iron | J. M. Meyers, Odanah | J. M. Dodd, Ashland. |
| Barron-Polk-Washburn-Sawyer-Burnett | H. B. Crommett, Amery | I. G. Babcock, Cumberland. |
| Brown-Kewaunee | R. C. Buchanan, Green Bay | T. J. Oliver, Green Bay. |
| Calumet | F. P. Knauf, Kiel | J. A. Schmidt, Brillion. |
| Chippewa | A. W. Wilmarth, Chippewa Falls | A. L. Beier, Chippewa Falls. |
| Clark | H. H. Christofferson, Colby | E. L. Bradbury, Neillsville. |
| Columbia | B. C. Meacher, Portage | A. J. Batty, Portage. |
| Crawford | A. E. Dillman, Steuben | A. J. McDowell, Soldiers Grove. |
| Dane | G. H. Keenan, Madison | T. W. Tormey, Madison. |
| Dodge | A. E. Bachhuber, Mayville | C. G. Schwalback, Juneau. |
| Door | | |
| Douglas | F. J. Johnson, Iron River | R. K. Lohmiller, Superior. |
| Dunn-Pepin | A. F. Helsing, Menomonie | B. J. Steves, Menomonie. |
| Eau Claire | H. A. Fulton, Eau Claire | E. L. Mason, Eau Claire. |

| County. | President. | Secretary |
|---|---|---|
| Fond du Lac | G. F. Scheib, Fond du Lac | F. A. Read, Fond du Lac. |
| Grant | C. R. Pickering, Muscoda | M. B. Glasier, Bloomington. |
| Green | L. A. Moore, Monroe | G. S. Darby, Brodhead. |
| Green Lake-Waushara-Adams | G. E. Baldwin, Green Lake | R. H. Buckland, Green Lake. |
| Iowa | W. S. Lincoln, Dodgeville | W. M. Gratiot, Mineral Point. |
| Jefferson | James Cox, Jefferson | C. R. Feid, Watertown. |
| Juneau | E. H. Townsend, New Lisbon | A. T. Gregory, Elroy. |
| Kenosha | W. M. Farr, Kenosha | J. H. Cleary, Kenosha. |
| La Crosse | C. H. Marquardt, La Crosse | M. W. Dvorak, La Crosse. |
| Lafayette | J. C. Hubenthal, Belmont | Susanne Orton, Darlington. |
| Langlade | M. J. Donohue, Antigo | J. C. Wright, Antigo. |
| Lincoln | C. C. Walsh, Merrill | Herbert Saylor, Merrill. |
| Manitowoc | J. R. Currens, Two Rivers | A. J. Shimek, Manitowoc. |
| Marathon | L. M. Willard, Wausau | S. M. B. Smith, Wausau. |
| Marinette-Florence | H. F. Schroeder, Marinette | M. D. Bird, Marinette. |
| Milwaukee-Ozaukee | A. J. Patek, Milwaukee | Daniel Hopkinson, Milwaukee. |
| Monroe | C. H. Cremer, Cashton | A. R. Bell, Tomah. |
| Oconto | J. B. Atwood, Oconto | R. C. Faulds, Abrams. |
| Oneida-Forest-Vilas | J. M. Hogan, Oshkosh | C. A. Richards, Rhinelander. |
| Ontagamie | V. F. Marshall, Appleton | J. P. Dohearty, Appleton. |
| Pierce | E. R. Holliday, Ellsworth | S. F. Rudolf, Ellsworth. |
| Portage | J. D. Lindores, Stevens Point | W. F. Cowan, Stevens Point. |
| Price-Taylor | C. E. Nystrum, Medford | G. H. McClure, Westboro. |
| Racine | E. A. Taylor, Racine | Susan Jones, Racine. |
| Richland | P. G. Lasche, Ithaca | A. D. Campbell, Richland Center. |
| Rock | G. W. Fifield, Janesville | E. B. Brown, Beloit. |
| Rusk | G. M. Carnahan, Bruce | W. F. O'Connor, Ladysmith. |
| Sauk | | Roger Cahoon, Baraboo. |
| Shawano | E. Puckner, Wittenberg | J. B. Gordon, Shawano. |
| Sheboygan | Edward Felter, Plymouth | W. F. Zierath, Sheboygan. |
| St. Croix | O. H. Epley, New Richmond | Boyd Williams, Hudson. |
| Trempealeau-Jackson-Buffalo | C. F. Peterson, Independence | H. A. Jegi, Galesville. |
| Vernon | John Schee, Westby | F. E. Morley, Viroqua. |
| Walworth | R. E. Rugh, Lake Geneva | M. V. Dewire, Sharon. |
| Washington | F. P. Leich, Jackson | S. J. Driessel, Barton. |
| Waukesha | J. H. Voge, Oconomowoc | R. E. Davies, Waukesha. |
| Waupaca | T. E. Loope, Iola | G. T. Dawley, New London. |
| Winnebago | B. C. Gudden, Oshkosh | W. L. Herner, Winnebago. |
| Wood | J. C. Hayward, Marshfield | J. B. Vedder, Marshfield. |

# SOCIETY PROCEEDINGS.

## EAU CLAIRE COUNTY MEDICAL SOCIETY.

The Eau Claire County Medical Society held a meeting on Oct. 30th at the Eau Claire Club. Dr. C. E. Tupper read a paper on *Leukemia*. Dr. J. E. Baird addressed the meeting on *Radiotherapy and a Report of Cases*, and a paper on *Epithelioma* was given by Dr. E. L. Mason.

Plans for holding the annual meeting of the West Wisconsin District Medical Society, the arranging of a suitable program and the entertaining of the visiting doctors, were discussed. It was decided to have the meeting Nov. 27th. The seven societies comprising this district, are: Chippewa, Dunn-Pepin, Eau Claire, Pierce, Polk-Barron-Washburn-Sawyer-Burnett, Rusk and St. Croix County Societies. Dr. R. R. Chase, Eau Claire is president and Dr. E. L. Mason, Eau Claire is secretary.

## FOND DU LAC COUNTY MEDICAL SOCIETY.

Fond du Lac County Medical Society held its Ninth Annual meeting at the New Erving Hotel in Fond du Lac, Wednesday, November 8, 1911, at 7 P. M. After supper President McDougall called the meeting to order. The minutes of the previous meeting were read and accepted. The report of the committee for revising the constitution was read and adopted and the committee discharged. The resolutions on the death of Dr. D. B. Wyatt were read

and spread upon the minutes. The reports of the secretary and the treasurer were read and accepted. The President's address was next read by Dr. McDougall. He touched upon the local conditions in Fond du Lac, how they appealed to the physician starting in practice and how they seemed to the physician with a long established practice.

The final business of the evening was the election of officers. The following were elected: President, Dr. G. F. Scheib, Fond du Lac; Vice President, Dr. L. A. Bishop, Fond du Lac; Secretary and Treasurer, Dr. F. A. Read, Fond du Lac; Censor, Dr. S. E. Gabin, Fond du Lac.

Meeting then adjourned.

F. A. READ, M. D., *Secretary.*

## GREEN LAKE-WAUSHARA-ADAMS COUNTY MEDICAL SOCIETY.

The regular meeting of the Green Lake-Waushara-Adams County Medical Society, was held at Wautoma at the Court House at 1 P. M., Sept 28. The following physicians were present: Drs. Scott, Berlin; Racek, Froelich and Siegmund, Princeton; Riordan of Neshkoro, Poppe and Vanderlind of Wautoma, Anderson of Wild Rose; McCallin of Hancock; Beck of Coloma, Baldwin and Buckland of Green Lake. Secretary's report read and accepted.

The meeting was called to order by Dr. Baldwin. The matter of application for membership was first taken up. Drs. Scott and McCallin were appointed to act with Dr. Riordan, the only censor present. They reported favorably upon the applications for membership of the following physicians: Drs. Griswold, Siegmund, Eehternacht, Walsh and Anderson. Motion made and carried that these men be accepted as members of the Society.

Motion made and carried that $7.00 be paid to the secretary from the treasury to assist in covering the expense of making a canvass of Adams County in the interest of the Society.

Program: *The Present Status of the Tonsil Operation*, Dr. H. W. Morgenroth, Oshkosh. Dr. Morgenroth presented an interesting collection of pathologic specimens.

*Treatment of Psoriasis*, Dr. Beck, Caloma.

*A Review of Cases in Gynecology*, Dr. McCallin, Hancock.

The papers were discussed by Drs. McCallin, Scott, Buckland and Morgenroth.

R. H. BUCKLAND, M. D., *Secretary.*

## JEFFERSON COUNTY MEDICAL SOCIETY.

The Jefferson County Medical Society held its quarterly meeting at Ft. Atkinson on Oct. 29th. Dr. Chester M. Echols, Milwaukee, read a paper on *Diagnosis of Common Intra-Abdominal Conditions*, and Dr. W. T. Clark, Ft. Atkinson, spoke on *Intestinal Obstruction*. Those present were: Drs. Nair, Bennett, Ogden, Clark, Morris and Caswell, Ft. Atkinson; Whyte and Field of Watertown; Reed and Cox of Jefferson; Engsberg of Lake Mills; Bowen of Johnson Creek; and Echols of Milwaukee. The next meeting will be held at Watertown.

## LA CROSSE COUNTY MEDICAL SOCIETY.

The seventh regular meeting of the La Crosse Medical Society was called to order by Dr. Marquardt at the La Crosse Club November 2, 1911. There were no papers read or cases presented at this meeting.

A committee consisting of Drs. Miller, Bradfield and Wolf were appointed to pass a resolution of condolence and present same at our next meeting, on account of the death of one of our members Dr. M. W. Dvorak who died on October 19, 1911, death being due to typhoid fever. Such resolutions to be presented to his immediate family and the journals and be made a part of this record.

Applications for membership of Drs. McLauren and Ehlert were then placed on file.

The meeting was then adjourned.

E. F. CHRISTIAN, M. D., *Secretary Pro Tem.*

## MARINETTE COUNTY MEDICAL SOCIETY.

Marinette County Medical Society held its annual meeting at the Hotel Marinette, Nov. 1. The officers elected for the coming year are: Dr. H. F. Schroeder, president; Dr. A. T. Nadeau, Vice president; Dr. M. D. Bird, Secretary and Treasurer; Drs. T. J. Redelings, H. R. Adams, and T. A. Lid, censors.

Dr. H. T. Sethey, Menominee, read a paper on *The Physician from the Financial Point of View*, showing the relation of the public to the doctor and the medical man to his patients. Dr. A. Walker of Menominee spoke on *Tumors of the Heart*, noting that cancer is still one of the difficult problems confronting the profession and that treatment other than early removal is without avail. Dr. S. Berglund, concluded the program with an exhaustive paper on *Diphtheria*, showing that anti-toxin has made great changes in the treatment and cure of the disease.

A seven course dinner was served after the meeting.

## PIERCE COUNTY MEDICAL SOCIETY.

The Pierce County Medical Society held its third quarterly meeting at River Falls, October 12, 1911. A rousing good meeting was held and the principal topic was *tuberculosis*. Dr. Woodworth of Ellsworth read a very interesting and instructive paper on *Early Diagnosis and Early Treatment of Tuberculosis*. He gave us a very clear picture of how a case should be handled from the start and gave a good many statistics on tuberculosis and a great deal from personal observation.

Dr. R. U. Cairns followed with a good sound talk on *Serum Therapy and Diagnosis of Tuberculosis*. A general discussion was then entered into. Dr. John Harding of St. Paul gave a talk on *Eye Diseases in which the General Practitioner is Concerned*. He also gave a very good talk on his trip to India.

Those present were Drs. Gendron. Cairns, Gallop of River Falls, Dr. Dill of Prescott, Dr. Kerr of Martell, Dr. Harding of St. Paul, Drs. Munger, Oyen, Woodworth. Rudolf and Lumley of Ellsworth. The Ellsworth physicians held a consultation on the way home for the relief of *tire trouble*. Dr. Munger was the surgeon in chief.

S. F. RUDOLF, M. D., *Secretary.*

## ROCK COUNTY MEDICAL SOCIETY.

Rock County Medical Society held its monthly meeting at the city hall at Janesville on Nov. 1st.

Dr. J. P. Thorne, Janesville, spoke upon *Specialists and Their Relation to the General Practitioner;* Dr. E. E. Loomis, Janesville, addressed the meeting on the *General Practitioner and His Relation to the Specialist.* Dr. A. C. Helm, Beloit, spoke upon *Hospitals.*

## ST. CROIX COUNTY MEDICAL SOCIETY.

The St. Croix County Medical Society met in regular session at Hudson, October 18, at the hour of 4:30 P. M., in the library of the Sanatorium. Upon this occasion the members of the society were the guests of the Sanatorium Company.

President Epley in the chair. Other members present, Drs. Martin, Banks, Darling, Kunny, Williams.

The medical fraternity of Stillwater were invited to be present at our meeting, Drs. Humphrey, Newman, Wells, Landon and Hains attending and adding with their presence greatly to our evening's enjoyment. Other visitors present were Drs. Washburn, Dr. Wiltrout, Dr. Lee, Dr. Hamilton of Minneapolis and Dr. Cairns of River Falls and Dr. Harding of St. Paul.

The program consisted of the following papers: *The Indian Method of Cataract Operation,* by Dr. Harding. *The Report and Exhibition of a Clinical Case,* by Dr. Darling. *Demonstration under the microscope of pathological specimens,* by Dr. Lee. *The Importance of a Routine Examination of the Mouth, Nose and Throat by the General Practitioner,* by Dr. Humphrey of Stillwater.

After the reading and discussion of the papers the meeting temporarily adjourned and all present retired to the dining room, where they enjoyed the most bountiful dinner and a feast of good cheer.

Following the dinner hour the meeting was again called to order by Dr. Epley and the unfinished business of the meeting proceeded with.

Dr. Williams who has been the Society's Secretary for this year at this time presented and read before the society his resignation as follows:

Hudson, Wis., October 18, 1911.

Gentlemen:—As I am about to remove from the jurisdiction of your society in the very near future, I herewith tender you my resignation as a member and also as secretary of St. Croix County Medical Society. The same to take effect from this date.

Respectfully and fraternally yours,

BOYD WILLIAMS, M. D.

Dr. Williams resignation was accepted by the society and an unanimous vote of thanks extended to Dr. Williams for the faithful services he has rendered to the society during his five years of membership.

Dr. Banks was appointed by the chair to fill out the unexpired term as secretary of the society. No further business coming before the society meeting was adjourned, until the next regular meeting in December.

BOYD WILLIAMS, M. D.

## TREMPEALEAU-JACKSON-BUFFALO COUNTY MEDICAL SOCIETY.

Trempealeau-Jackson-Buffalo County Medical Society held its annual meeting on Oct. 13th at Arcadia. The social part of the meeting was held at the Opera Hall at 8:30 in the evening, where Dr. M. P. Ravenel of the University of Wisconsin delivered a short address. A buffet luncheon was served to about fifty guests.

## WINNEBAGO COUNTY MEDICAL SOCIETY.

Winnebago County and the Oshkosh Medical Societies held a joint meeting on Nov. 15, at the Athearn Hotel, Oshkosh. The attendance was about 100. A banquet was served at 8 o'clock.

Dr. J. B. Murphy, of Chicago, was guest of honor and delivered an illustrated address on *Recent Work on the Surgery of the Bones and Joints.* The physicians who attended included those from the various cities of the Fox River Valley and Oconto, Marinette, and Menominee.

---

**Transmission of Syphilis to Rabbits by Pure Cultures of Spirochaetae of Man.** Hoffmann, Dr. (From the Institute of Infectious Diseases of Prof. Gaffky at Berlin. Deutsche Med. Woch., 1911, No. 34, p. 1546), injected into the testicles of young rabbits immense quantities of spirochaetae in from 2 to to 3 ccm. of a paste made of a pure culture of spirochaetae from human chancres on serum agar with bouillon, and produced syphilitic affections of the testicles, pervaded by great masses of spirochaetae pallida. Pieces of this tissue were introduced under the membrane of the testicles of other rabbits, in order to observe whether a further breeding and perhaps an increase of pathogenicity were possible, particles of the diseased tissue of the testicles were brought into serum of horses. After 5 days there was exuberant growth and intense multiplication of spirochaetae which showed lively motion.

Through these observations the chain of proofs for the etiological significance of spirochaetae pallida for the development of syphilis is, as far as possible, closed.

The transmission of pure cultures of spirochaetae to animals opens a prospect for a method of sure and undisputable distinction of spirochaetae pallida from other harmless spirochaetae, similar in shape, which so far was not possible.—C. Zimmermann.

---

**On Fever in Inflammations of the Eye.** Abelsdorff, G., Berlin (Centralblatt für Prakt. Aug. 35, Sept., 1911, p. 261), had great difficulty to convince a well known internal clinician, that a young man, suffering from a bilateral iritis, could not have a daily rise of temperature. A few months later the diagnosis of an incipient pulmonary tuberculosis was certain.

In 2 out of 3 cases of membraneous conjunctivitis with diphtheria bacilli A. found from 38.2 to 38.4° C. From this he is far from inferring that fever in membraneous conjunctivitis proves its diphtheric character, but emphasizes that the thermometer, otherwise so little employed by the ophthalmologist, deserves a more frequent use in this disease.—C. Zimmermann.

---

## THE ASSOCIATION OF COUNTY SECRETARIES AND STATE OFFICERS OF THE STATE MEDICAL SOCIETY OF WISCONSIN.

W. F. ZIERATH, M. D., Sheboygan
President.

M. V. DEWIRE, M. D., Sharon
Vice-President.

ROCK SLEYSTER, M. D. Waupun, Secretary.

NEXT ANNUAL SESSION, WAUSAU, 1912.

**Under this heading will be published each month, papers, editorials, sermons, reports of meetings and all that relates to the County Medical Societies of the state. To it all are invited and asked to contribute, especially the County Secretary. It is yours—make good use of it, and may it be of help to every County Society. It will be edited by Rock Sleyster of Waupun, secretary of the new association, to whom all communications for this department, reports of meetings and news matter should be addressed.**

## BOOSTER SERMON.

BY ROCK SLEYSTER.

### YOUR ANNUAL MEETING.

December is here—the month when most societies hold their annual meeting. This is the all important meeting of the year and the success of the society hinges largely on the business transacted at this time. It is of the utmost importance that the officers and members not only show their interest by their attendance at this meeting, but that they give some thonght and formulate some plans for the work to be done. This meeting decides the policy, the work and the program for the society in the coming year. If you have "Ideas of your own regarding your county society" *now* is the time to bring them forward—and that is what every society needs—the man with "Ideas of his own". Too many of us are possessed by a mental inertia when it comes to our organization which precludes "Ideas of our own" and leaves it entirely to the other fellow.

I am writing to you, my Booster sympathizer, you who say to your county secretary "Bully—you are doing splendidly", and think that, because he is, there is nothing for you to do. Now it isn't right to let your secretary enjoy a monopoly on all the enthusiasm in your society. Many a good secretary has been spoiled by being allowed to maintain a corner on this necessity. Oil your thinker and see if you can't help him with the plans for 1912. Do it now and tie a string about your finger so you won't forget to mention them when you get there.

There are a few subjects that I would like to see brought up for discussion in every society at this time. I will risk being termed a meddler by writing frankly on some subjects for the Annual Meeting. First—

THE ELECTION OF YOUR DELEGATE.

Too little importance has been attached to the election of a delegate to the State Society. The business of the State Society is transacted by The House of Delegates. It is important that your society be represented. Two things, therefore, should be considered in this choice: first, that the man make use of his credentials and attend the annual session—second, that he be a man in touch with your society, and familiar with organization work.

Now I want to put forth some reasons why twelve times out of ten your Secretary is the best man for the job. He is, with few exceptions, in closer touch with the work of your county and the state societies than any other. He knows what has been done and what needs to be done. On him depends the success of your local organization. The House of Delegates and The Association of County Secretaries and State Officers meet the same day. It is important that he attend both of these meetings for they need his experience and the good he derives from these meetings reverts back to you. I believe every County Society should not only send its Secretary to the Annual Meeting as its official delegate but should send him with transportation paid. It would be economy to you and some recognition at least of the splendid service he has so cheerfully given.

At the next meeting of The House of Delegates a motion will be made to amend the constitution so that the County Secretary will be made an ex-officio member of the House. We believe his work and experience entitle him to this recognition. Instruct your Delegate to support this motion.

MEMBERSHIP.

No society is working at its best or accomplishing the maximum of good without a complete membership. With few exceptions there are desirable, eligible men in the county who are not members. I want to urge on you again the importance of securing their membership. Take this matter up at your annual meeting as *the most important business.* Treat it in a businesslike way. See to it that in 1912 you have a membership committee whose business it shall be to work with these men and make your organization complete. This

office will gladly aid and work with such a committee during the coming year.

### YOUR PROGRAM AND ATTENDANCE.

Plan your program for 1912 carefully. Your attendance (and this spells success) depends largely on your program. I believe every society should hold two meetings a year in which social features play an important part—one in the winter and one in the summer. Let this winter meeting follow a banquet. Nothing promotes good-fellowship like the after-dinner cigar. A number of the county societies of Wisconsin are holding an annual picnic or outing meeting in the summer. Calumet County has held its second annual automobile run and it has proven its most popular meeting. At one of your meetings try to secure a paper by some outside speaker of standing. Last night I attended a meeting of the Winnebago County Society. There was an attendance of ninety. An address by a well known surgeon and a banquet drew this record breaking attendance. One more point. When you have a good meeting planned, invite your neighbors. You will be surprised at how many from outside your county will accept these invitations to meet with you. One more word about your program—the extension division of the State University may be of help and should be remembered in making up your 1912 program.

### THE COUNTY SOCIETY AND THE PUBLIC.

It is my belief that the County Society has a duty and an obligation to perform to the public. We often complain of the ignorance of the public relative to our profession, the public health and sanitation. Can our County Societies be of help in educating the public along these lines? This is a subject which merits discussion at your annual meeting. May I suggest a public meeting in 1912, with possibly an outside speaker, to which the public and the other professions especially your county school teachers are invited. While considering this subject do not forget a talk along the "McCormack" line.

Many public movements should be encouraged and receive the cordial support of our County Societies. Such movements as the agitation for a National Department of Health and the State Anti-tuberculosis Association are deserving of something more than "silent prayer".

Last and above all else "Be a Booster". Your County Society is just what you make it. Speak always a good word for it, boost it, think of it as the best in the state and by and by it will be.

# THE SCIENTIFIC SPIRIT IN THE COUNTY SOCIETY.*

BY E. B. BROWN, M. D.,

BELOIT.

Time was when medicine was purely an art. It consisted in the art of healing without knowledge of the why, or regard for the wherefore. That time has passed. We are now in the age of Science, not science alone but Science predominating over art in the study and practice of medicine.

Science is the lever that moves the world and in no line has it been more active than in the line of medicine and surgery. So general has been the spread of scientific knowledge even among the laity, that a man cannot safely practice medicine to-day without some regard for, and more or less devotion to Science. In the language of Malvolio, some men are born scientists, some eagerly acquire science, but alas a great share have science thrust upon them.

To have the scientific spirit does not mean that a man must be an adept with the microscope, the test tube and the incubator or that he must be able to determine the opsonic index or test for the Wassermann reaction. It does not even mean that he must be able to stain for T. B. or analyze a stomach contents or properly interpret an X-ray picture. But it does mean that he recognizes the value of these procedures and is in sympathy with all study and experimentation that tends to make diagnosis more exact and treatment more specific, and with all measures that tend to eliminate preventable diseases.

Now what should be the position of the County Society with regard to the scientific spirit? As the unit of the medical organization of the country, it should be a source and inspiration of scientific spirit for the profession of each county. If it fails in this, the failure must be due either to lack of attendance on the part of the members or failure to provide a timely and interesting program.

The first requisite of all is the getting of the men together. I do not believe that a group of medical men can spend even a half hour together in ordinary conversation without some inspiration to the scientific spirit. Listen to the conversations before the set program begins and you will find them talking about interesting cases. While riding in a car recently to one of our district meetings with a group of doctors, I was interested in noting the trend of the con-

*Read at the 2nd Annual Meeting of the Association of County Secretaries and State Officers, Waukesha, June 6, 1911.

versation. One gave the history, symptoms and signs of a case he had just operated upon for an unusual abdominal tumor and the others attempted to make a diagnosis. Another told of the findings in a case of supposed cystic tumor in the inguinal region, which turned out to be a chronically dilated appendix forming a sac larger than one's fist, and so on. Now just the rubbing up against one's fellows and finding out what they are doing is one of the greatest inspirations to a man to keep abreast himself.

When I go around collecting dues, as I find it necessary to do I am sorry to say, I run across this and that member who says, "Well, I guess I'll drop out of the County Society. I don't see where I get any benefit from it." That man is invariably one who attends about once a year or perhaps not that often. He certainly gets no scientific inspiration and how could he expect to?

To have then, even a first chance to promote a scientific spirit, we must get the men out to the meetings. To do this, any procedure is justifiable even to a vaudeville entertainment if that will bring the result. No class of men are harder to get together than the doctors. The doctor always has at hand the excuse "too busy" or "a sudden call" if he is not anxious to attend. But the strange thing is that it is not as a rule the least busy men who are the most loyal, and too, we find that a man who one year excuses himself as too busy, another year, having been made an officer or appointed on a committee, becomes quite a regular attendant. A little personal responsibility often makes a regular attendant. But Dr. Jegi I see by the program is to tell us how to get the members out.

Having then built up a society strong as to attendance, the matter of promoting the scientific spirit is not so hard. As I said before, the mere association will prove an inspiration. But there are certain measures which are of especial importance.

First of all, the program. It is no easy task to arrange a program which shall be timely, interesting and instructive, and hence inspiring. And since on the program depends largely the general interest as well as the scientific spirit of the society, I believe the program committee should be appointed early; not at the last meeting of the year to get together and, at one meeting, lay out the program for the following year; but they should be appointed several months ahead, say in September or October or if the officers are to act as the program committee, they should begin operations thus early. They will then have time to find out what men are interested in certain lines, what ones have special cases or original work to report.

They can study the program being carried out and note its successful features and where it has failed.

The program if possible, should be so balanced that the member returning from the meeting shall say to himself "Well, I've had a good time. I've meet some good fellows. I've heard some interesting things. I've had a chance to express myself, and withal, I believe I've received some scientific inspiration." And the scientific side should not be too prominent but he should feel that he has been in a scientific atmosphere which he has taken in almost unconsciously.

When a man hears another give a case report in a scientific manner, he is apt to be a little more careful in keeping records of his own cases. If he finds that his colleague is using recently reported methods of diagnosis or treatment, he will be likely to look them up himself.

Especially of value in connection with the program, is the inoculation of scientific spirit into a society which comes with the occasional visit of some one from the larger medical centers, who can bring the very latest in his line and present it in a thoroughly scientifie manner anl yet without losing our interest because he speaks with the authority of large experience and close observation. Our Society has been benefitted by several such visits this year from such men as Drs. Frank Billings, Edward Ochsner, Daniel Eisendrath, Lewis Bremmerman and A. I. Koll, and we have yet on our program Dr. Emil Beck and as the last inspiration of the year, a talk from our worthy State Secretary, Dr. Sheldon.

In connection with the program or as a side discussion, various questions and problems of general scientific interest may profitably be brought up, such as Medical Inspection of Schools, Establishment of a National Board of Health, Inspection of local slaughter houses, bakeries, etc., and various other subjects in the line of public welfare, preventive medicine and medical legislation. In all of these subjects, the county society should show its scientific spirit by taking an active and aggressive interest. The society can also do much by encouraging, stimulating and supporting the various health officers of the county.

The postgraduate course of the American Medical Association is another means of promoting the scientific spirit in the county society. I believe this course to be a splendid thing for any society, but our experience has been that the scientific spirit among the members must be at a pretty high mark before it can be carried out successfully.

General conventions and clinics are always a source of scientific inspiration and attendance on these by as many members as possible and as often as possible, should be urged. It would pay the County Society I believe, to have a reserve fund devoted to paying the expenses of several members to be appointed by a vote of the society, that the society may be well represented at State and other meetings. We have at least one member, who, I am told, makes regular weekly trips to Chicago to attend clinics. Where possible, such a practice is valuable to the society as well as invaluable to the individual.

In this incomplete and rambling manner, I have endeavored to bring up a few points in connection with the scientific spirit in the County Society. In conclusion, let me exphasize that the first requisite is to get the general interest of the members and so build up a society strong in attendance. Then through the means of a well balanced program, discussion of subjects of general as well as specific scientific interest, then the introduction occasionally of speakers of recognized scientific authority, and encouragement among the members of attendance at the various larger medical gatherings and clinics, there will be developed in the society a scientific atmosphere which cannot but tend toward the raising of the scientific standing of the members in the county.

---

**On Fever in Inflammations of the Eye.** HIRSCHBERG, J., Berlin (Centralblatt für prakt., Aug., July. 1911, p. 193). Regular measurements of the temperature of various eye patients made by O. Fehr at the Rudolf Virchow Hospital at Berlin, showed no fever in blennorrhoea neonatorum (23 cases) and gonorrhoic ophthalmia in 11 adults. Out of 6 cases of panophthalmitis only one, who had florid sepsis with intense chemosis, had a higher temperature. Iritis is rarely accompanied by fever. Hence H. concludes that fever in consequence of intense inflammations of the eye is observed more rarely than one would expect.—C. Zimmermann.

---

**Scopolamin-Morphium-Narcosis and Eye Operations.** VON PFLUGK, A., Dresden (Klin. Mon. für Aug. 49, 11, Aug., 1911, p. 242), calls attention to the more or less mydriatic effect of this narcotic mixture, which may prove very dangerous in patients predisposed to glaucoma. For illustration he reports the following case: A woman had T+I. Anterior chamber was shallow, cornea hazy, pupils of medium size, did not react. V R 6/60 V L 6/9. These changes of the previously perfectely normal eyes dated from the day, on which the patient was put to sleep with Morph. 0.02 and scopolarmin 0.0005 for extirpation of a struma. Iridectomy on each eye improved V R to 6/12, V L remained 6/9.—C. Zimmermann.

---

# THE WISCONSIN MEDICAL JOURNAL

DECEMBER, 1911.

---

## TRANSACTIONS
OF THE
## SIXTY-FIFTH ANNUAL MEETING
OF THE
## STATE MEDICAL SOCIETY OF WISCONSIN
AT WAUKESHA, JUNE 7, 8 and 9, 1911.

**OFFICERS:**

PRESIDENT.
J. M. DODD, Ashland.

1st Vice-President, T. J. REDELINGS, Marinette.
2nd Vice-President, C. A. ARMSTRONG, Boscobel.
3rd Vice-President, H. E. DEARHOLT, Milwaukee.

SECRETARY.
CHARLES S. SHELDON, Madison.

ASSISTANT SECRETARY.
ROCK SLEYSTER, Waupun.

TREASURER.
SIDNEY S. HALL, Ripon.

COUNCILORS.
1st District—M. R. WILKINSON, Oconomowoc.
2nd District—G. WINDESHEIM, Kenosha.
3rd District—F. T. NYE, Beloit.
4th District—W. CUNNINGHAM, Platteville.
5th District—G. V. MEARS, Fond du Lac.
6th District—H. W. ABRAHAM, Appleton.
7th District—EDWARD EVANS, La Crosse.

8th District—T. J. REDELINGS, Marinette.
9th District—O. T. HOUGEN, Grand Rapids.
10th District—R. U. CAIRNS, River Falls.
11th District—J. M. DODD, Ashland.
12th Disrict—H. E. DEARHOLT, Milwaukee.

PROGRAM COMMITTEE.

A. W. GRAY, Milwaukee, Chairman. A. J. PATEK, Milwaukee.
And the Secretary.

COMMITTEE OF ARRANGEMENTS.

JOS. F. SMITH, Wausau, Chairman.

COMMITTEE ON PUBLIC POLICY AND LEGISLATION.

A. W. GRAY, Milwaukee, Chairman. J. P. McMAHON, Milwaukee.
F. F. BOWMAN, Madison.

COMMITTEE ON MEDICAL DEFENSE.

G. E. SEAMAN, Milwaukee, Chairman.
A. J. PATEK, Milwaukee, Secretary. S. S. HALL, Ripon.

DELEGATES TO A. M. A.

C. S. SHELDON, Madison. A. H. LEVINGS, Milwaukee.
J. F. PEMBER, Janesville.

ALTERNATES TO A. M. A.

WILSON CUNNINGHAM, Platteville. R. G. SAYLE, Milwaukee.
W. T MURPHY, Waukesha.

PUBLICATION COMMITTEE.

A. J. PATEK, Milwaukee; G. E. SEAMAN, Milwaukee; O. H. FOERSTER, Milwaukee; S. S. HALL, Ripon; C. S. SHELDON, Madison.

COMMITTEE ON PREVENTION OF TUBERCULOSIS.

C. A. HARPER, Madison; G. E. SEAMAN, Milwaukee; J. M. BEFFEL, Milwaukee; M. P. RAVENEL, Madison; C. H. STODDARD, Milwaukee.

COMMITTEE ON MEDICAL EDUCATION.

E. S. HAYES, Eau Claire. EDWARD EVANS, La Crosse.
W. H. WASHBURN, Milwaukee.

COMMITTEE ON NECROLOGY.

A. J. PATEK, Milwaukee. E. L. BOOTHBY, Hammond.
J. C. REYNOLDS, Lake Geneva.

COMMITTEE TO ACT WITH BOARD OF PUBLIC INSTRUCTION A. M. A.
C. R. BARDEEN, Madison.

DELEGATE TO NATIONAL LEGISLATIVE COUNCIL A. M. A.
B. M. CAPLES, Waukesha.

DELEGATE TO COUNCIL ON MEDICAL EDUCATION A. M. A.
M. P. RAVENEL, Madison.

---

## MINUTES OF THE SIXTY-FIFTH ANNUAL MEETING OF THE STATE MEDICAL SOCIETY OF WISCONSIN.

WAUKESHA, JUNE 7, 8 AND 9, 1911.

### PROCEEDINGS OF THE GENERAL SESSION.

WEDNESDAY, JUNE 7th.

Morning session called to order at 11:45 o'clock Wednesday, June 7th, by the President, Dr. Byron M. Caples.

Invocation by Rev. C. E. Bovard.

PRESIDENT: We are fortunate today in having with us a member of the medical profession who is also our mayor and he is as big a politician as he is a man. He does things in a big way. It is impossible for him to do them in any other way. I have the pleasure of introducing to you Mayor Love. (Great applause.)

MAYOR GEORGE S. LOVE, Waukesha: Mr. President and Members of the Wisconsin Medical Society, Ladies and Gentlemen: My friend Caples here is mistaken. He says I am as big a politician as I am in size. I am no politician; never was; never belonged to a political party, therefore I could not be a politician. But I happened to be carried into this office probably by some of my reformed friends.

I am glad to welcome this body of men and women of our profession to our city. You have done us a great honor to come here. You have honored us once before, and we hope probably in another ten years you will be willing to come back to us, or sooner if you like.

We in Waukesha are proud of our little city. It is only a country village to be sure. But we think that we have one of the finest little places in the world.

Waukesha, as you all know, was made famous a number of years ago by the discovery of the health-giving qualities of the spring waters of Waukesha. Since then Waukesha spring water has become known throughout the world.

Waukesha in later years has developed into quite a business town. We have, as I said before, spring industries employing some 300 to 500 men. We have one of the finest motor works in the country as well as other interesting factories which you will no doubt be glad to see. We have the

only dehydrating plant in the world, and it will pay you to go over and see what is being done there.

And perhaps last but not least, Waukesha has made a reputation for the quality of the stuff we feed the Milwaukee babies on, namely the milk producing farms. Waukesha county furnishes nearly all the milk that is used in Milwaukee; and among the places particularly that if you have the time it will pay you well to see, are the Kieckhefer farms at Pewaukee. When you go over to the Beach some of you will probably visit them. And there is another farm out here at the west of Waukesha known as the Williams & Rowlands Milk Company that you should see.

I am not a speechmaker. The people of Waukesha know it and I guess you do too. I thank you for your kind attention. (Great applause.)

PRESIDENT: We have another man with us today who has been honored by his home city, and I hope later you will hear of other honors. He is also a mayor. I have the pleasure of introducing to you Mayor Dodd, of Ashland. (Great applause.)

DR. J. M. DODD, Ashland: Mr. President and Members of the State Medical Society: On behalf of the State Medical Society of Wisconsin I take pleasure in accepting the hospitality of this beautiful city, so graciously tendered by its mayor.

Our experience during the past 24 hours during which time several of our departments have been in session, leads us to believe that our expectations are to be fully realized in this meeting.

During my experience as a member of this Society we have never met in a more beautiful city; nor have we enjoyed such a magnificent meeting place as where we are meeting now.

I think the weather man has never favored us with such a delightful article of weather as he has given us this morning.

Now, to the mayor and the people of Waukesha, we will say that we expect to enjoy all the hospitality that is extended to us here, and expect to bask in the sunshine and rest in the shade of the beautiful trees and enjoy your walks and drives and all the entertainment which you may provide for us, and that we expect as the years go by we will look back on the 1911 meeting at Waukesha as one of the brightest spots in our memory. (Great applause.)

PRESIDENT: We will next listen to the report of the Arrangement Committee. I think the chairman of this committee has arranged with the mayor to have everything wide open. Sunday I believe the mayor closes some resorts up, but the drug stores are all open all the time. We will listen to the report of Dr. W. T. Murphy, and see if he will verify this. (Laughter and applause.)

DR. W. T. MURPHY, Waukesha. I will speak to you of the entertainment this evening at 7 o'clock. There will be 100 automobiles at the foot of the walk, and I hope there will be enough to fill them. We will ride about town for an hour and then end at Moor Baths, where Mr. Willett M. Spooner will

speak on Medical Defense. There will also be some moving pictures which will be explained to you by Dr. Dearholt a little later.

At the same hour, 8 o'clock, accompanied by your wives and friends, we will stop at the home of Dr. Margaret Caldwell. She and Dr. Wright, assisted by the wives of Waukesha County physicians, will entertain the ladies.

President Caples will hold a reception at the Waukesha Springs Sanitarium on Thursday, 5:30 to 7:30.

The annual banquet will be held here Thursday evening at 8 o'clock. It will be both wet and dry.

Friday afternoon at 2:30 there will be an electric car ride to Waukesha Beach. We have provided a lunch and hope you will all attend. (Applause.)

PRESIDENT: The Chairman of the Program Committee, as you perhaps have all noticed, has arranged a program that will be unusual. We will listen to the report of Dr. Gray.

DR. A. W. GRAY, Milwaukee: Mr. President and Members of the Society: Your program committee this year presents the orators, with unusual confidence in your approval. The kindness of these gentlemen in coming to us from such a distance—Boston—I think all appreciate thoroughly.

This afternoon, late in the afternoon Dr. Richard C. Cabot will give the annual address in medicine, the title being Essentials and Non-essentials in Physical Diagnosis.

You all know Dr. Cabot by reputation as a man eminent in research work in medicine and also eminent in sociological matters. He has been something of an iconoclast in matters medical and I think in many of his efforts that we will sympathize with and approve of him.

Tomorrow afternoon Dr. Joel E. Goldthwait, also of Boston, will give us the annual address in surgery. His subject will be The Present Understanding of Rheumatoid Conditions. As you know, Dr. Goldthwait stands among the leaders in orthopedic surgery in this country to-day. I think we are particularly fortunate in securing these eminent men to address us.

In regard to the rest of the program, your committee presents it with considerable pride. Not pride in its own achievement, for, believe me, no program committee has ever had to do less work in getting up a program. Three-quarters of the program at least consists of volunteer papers, and this is a matter of particular pride to us. It has not been necessary to drag the papers out this year by the roots from the systems of our physicians; and if other program committees in the future notice this same tendency, it is likely that editorship will be all that is necessary.

We have tried to round out the program by inviting a few which seem necessary, so as to represent most of the specialties.

We wish particularly to call your attention to one thing. We have cut down the number of papers somewhat for a purpose. It has seemed to us that the particular value, or a great value, in the scientific work of the Society consists in the discussion of papers.

We want free discussion, strong opinions strongly expressed, and hope that members besides those who open the discussion, will enter into the spirit of the occasion properly. If this is done we feel that the scientific program will be thoroughly discussed. (Great applause.)

SECRETARY: I would suggest to the members that we all be careful to register. The registry book is at the entrance on the lower floor. That is the only record of our attendance, and we want all your names in the book before you leave the meeting.

There is nothing else except the banquet. I have special and specific information from headquarters that it is to be a function of unusual magnificence and splendor, and that no one can afford in this short life in which we live to let it pass. So if you have not secured your banquet ticket for tomorrow evening, do so when you go out to register. (Applause.)

PRESIDENT: There is another matter not on the program. Dr. Dearholt will please explain about the moving pictures.

DR. HOYT E. DEARHOLT, Milwaukee: At the meeting of the American Public Health Association held in Milwaukee last year, the members from all over the western continent were very much interested in the display of moving picture films which have been put out for the purpose of giving popular instruction in matters of preventive medicine. After this splendid endorsement it seemed to me that the members of this society would be no less interested perhaps in viewing these films. The Wisconsin Anti-Tuberculosis Association has four of these films and a moving picture machine, which goes around the state, and we have selected just two of the most interesting of these films, the so-called "Red Cross Seal Drama," which is a tuberculosis film, and the "Man Who Learned," which is a milk film.

The idea has been, as much as possible, that we do not want to force this upon men who are out for a good time. On the other hand, outside of the didactic side of the film there is a very interesting little drama in each one of these, and particularly "The Man Who Learned" tells a very pretty little story, and I hope that the arrangements may be such over there to-night that our films will be where they will not interfere in any way with the other general amusements and hilarity. But those who wish may see these things, and particularly with a view that if they are found as acceptable as we think they will be on sampling, that perhaps an effort may be made by which you can get these films for the instruction of people in your home communities. (Applause.)

Then followed the Scientific program as reported on pages 38-50 of the Wisconsin Medical Journal for June, 1911.

## TUESDAY, JUNE 6th, 1911. 8 P. M.

Meeting called to order at the Rest Haven Hotel, Waukesha, by the President, Dr. B. M. Caples, of Waukesha. The roll was called by the Secretary and a quorum was found to be present.

PRESIDENT: We will listen to the report of the Committee on Medical Defense, of which Dr. G. E. Seaman is chairman. It will be read by Dr. Patek, who is the Secretary.

*To the House of Delegates, State Medical Society of Wisconsin.*

GENTLEMEN: The Council on Medical Defense expresses the greatest gratification in presenting this, its second annual report.

Since the establishment of the Medical Defense plan in January, 1908, the State Society has been called upon to lend assistance in twenty-four cases eight of which came to notice in the past year; four of these are still pending. How well this work has been accomplished may be seen from the abbreviated report appended.

In all cases that have thus far come to trial the Society has been victorious. These few words are all that need be said in justification of the establishment of Medical Defense by the State Medical Society.

Too great praise cannot be given to our attorney, Mr. W. M. Spooner, because it is due to his masterly study of the many and intricate details of the cases presented, that this unusual success is to be largely attributed.

ARTHUR J. PATEK,
G. E. SEAMAN,
*Council on Medical Defense.*

During the reading of the report Dr. Patek said: I have a resume of the cases made by Mr. Spooner, a brief statement of the cases that have been defended, which if the chairman wishes, I will read.

PRESIDENT: Read them.

DR. PATEK: These are all the cases up to date, beginning with January, 1908, and up to January of this year inclusive. All of these are amplified in Mr. Spooner's full report to which access may be had if further information is desired.

In several of these cases our attorney was instructed to assist in the preparation of the defense, though we were not authorized to conduct the defense.

Case 4 will probably never be called for trial.

In regard to case 22: Mr. Spooner thinks that the issue is doubtful, because the Lumber Company is a party defendant. He thinks that because feeling runs so high in that county against the Lumber Company damages may be assessed.

Of all these 24 cases, several of which are still pending, not one which has gone to trial has been lost. I think the report is an exceptionally gratifying one.

Resume of cases whose defense has been undertaken by the Society. (January, 1908, to June, 1911.)

Case 1. Slander. Action not prosecuted, and upon motion of defendant the complaint was duly dismissed by order of the court.

Case 2. Malpractice for improper care of confinement. Advice only given because alleged negligence occurred prior to the organization of Medical Defense.

Case 3. Faulty Diagnosis. Suit threatened because physician had made a diagnosis of small-pox, this diagnosis having been reversed by the health department. No action was taken.

Case 4. Fracture of leg. Case has been pending since last year.

Case 5. Fracture. Defendant physician withdrew his case and submitted it to a Casualty Company for defense.

Case 6. Compound fracture of radius. This case was nonsuited upon motion of our attorney.

Case 7. Fracture of Femur. No active assistance given because alleged negligence took place prior to organization of medical defense.

Case 8. Case was barred by statute of limitations. Assistance given by attorney in preparing argument.

Case 9. Improper diagnosis of treatment of a surgical condition resulting in amputation of leg. Case was dismissed.

Case 10. Nature of case not recorded. Action was dismissed.

Case 11. The Society was notified one day before this case was called for trial in court that defendant desired defense by it. Of course it was absolutely impossible to render defense. No defense was provided.

Case 12. Negligent setting and treatment of a fractured radius. There was no available defense upon the merits of the case, as the deformity was very great. This case was bitterly contested, and a small ($1,200) verdict returned. Appealed to Supreme Court on a question of law, judgment of lower court in favor of plaintiff reversed, and complaint ordered dismissed.

Case 13. Act alleged as negligence occurred prior to organization of defense system, therefore defense could not be undertaken. Some assistance was given in preparation of the case.

Case 14. Defense was declined because defendant was not a member of his county society at the date suit was brought.

Case 15. This case was settled by the Physician's Defense of Fort Wayne, although notice was served upon our Society at the time suit was brought.

Case 16. Fracture of Radius with deformity resulting in permanent crippling of arm. Judgment was rendered dismissing complaint. This judgment was appealed but this too was dismissed.

Case 17. Action was brought against three physicians, all of whom had treated a boy who suffered severe gunshot injury of skull, which subsequently developed caries of bone and intracranial abscess. A hard fought trial of six days' duration resulted in a verdict in favor of the three defendants.

Case 18. Plaintiff, a woman, being sued by her physician to recover the value of services rendered, counterclaimed and alleged negligent treatment, demanding $25,000 damages, the negligence assigned referring to an alleged unskillful and negligent manner of conducting two separate vaginal operations. A motion to make the answer and counterclaim more definite and certain is still pending.

Case 19. Suit brought against physician because it was alleged that pieces of gauze had been left in an open wound, causing infection. Judgment rendered in favor of defendant.

Case 20. Action was dismissed by plaintiff when confronted with facts showing that doctor was not culpable.

Case 21. This was action started to recover damages for negligence in leaving a packing in the head of a patient, which produced irritation and inflammation, resulting in serious disorder.

An answer was interposed by the defendant doctor. A discovery examination of the plaintiff was taken. At the conclusion of this examination and the marshalling of the evidence the action was dismissed.

Case 22. This action, now pending in Vilas County, was brought by the plaintiff against a physician, alleging negligence in the setting of a fractured femur. The lumber company for which the physician worked was made a party defendant. The issue is doubtful.

Case 23. This is an action started in northern Wisconsin against a doctor wherein it is alleged that he was guilty of negligence, by a woman plaintiff, in attendance and treatment and failure to treat at the time of the birth of a child. This action is now pending.

Case 24. This is an action started in Green Lake County wherein plaintiff claims negligence in the setting and treatment of a fractured radius. This action is now pending in the circuit court.

On motion made, seconded and duly carried the report was accepted.

PRESIDENT: We will now listen to the report of the Committee on Public Policy, Dr. A. W. Gray, Chairman.

DR. A. W. GRAY: The Committee on Public Policy and Legislation has no set report to make; but if you will indulge me a minute I will tell you about the present condition of the optometry bill. In relation to any other legislation there has been none originated this year. Whatever effort we have had to put forth has been to defeat legislation, because there was nothing which we cared to bring before the legislature.

The optometrists came up this year with their bill as usual before each session of the legislature and as usual the bill was very comprehensive and would have allowed the so-called optometrists to practice a very broad field of medicine.

It became very soon evident that the temper of the legislature was such that some legislation would have to be passed; but irrespective of that fact the committee with the advice of certain oculists came to the conclusion that it was really proper that some regulative legislation should be passed in relation to optometrists.

So the committee went to Madison, took the optometrists' bill, amended it where necessary, and had a hearing before the committee of the senate to which the bill had been referred; and after stating the position of the State Medical Society as being opposed in principle

to any legislation recognizing optometry, conceded that regulation was possible and could be granted as a compromise.

The physicians representing the State Medical Society then met with the optometrists and were able to come to an agreement. They agreed to all the amendments which we had proposed with one exception.

The bill as it stands at present is very satisfactory to the committee. It recognizes the optometrists, defines optometry in a very restricted sense, more restricted, I believe, than in any other state in the Union, makes the optometry examining committee a committee under the State Board of Health, which has the power to approve or disapprove of all acts of the committee, requires a preliminary education equivalent to that of a standard high school of the state of Wisconsin, and gives the committee of examiners power under the State Board of Health to raise the so-called professional requirements as seems best.

Under the bill all examination questions will be submitted to the State Board of Health, and all examination papers likewise. Reports of all meetings of the committee will be immediately reported to the State Board of Health.

After this bill was agreed upon by the so-called optometrists and ourselves, somebody slipped in some amendments broadening the definition in a way that your committee on legislation was not pleased with. Communication with the committee of the senate which had this bill in charge, however, rectified that matter very quickly, and the amendments were stricken out.

I understand at present that the bill is still in committee or else reported out yesterday and it seems likely that it will pass in its present condition.

The Legislative Committee have taken a stand rather opposed to that taken by the country in general.

As you all know, the American Medical Association has apparently been standing for no legislation on this subject whatever, taking the position that any legislation would be a recognition of the right to practice on the part of individuals not qualified to practice medicine.

However, the Legislative Committee, acting as I said with the advice of some oculists, recognize the fact that the optometrists exist, that they are plying their vocation, that they are increasing in numbers in Wisconsin very rapidly, especially in view of the fact that some 35 other states are requiring examinations, and that Wisconsin

was becoming a dumping ground for those desiring to practice optometry who did not wish to take examinations in other states.

So that instead of taking the position that we are compromising with them, the committee wishes to take the position that it is not forced into any compromise, but is actually agreeing that regulation is the proper thing under the circumstances.

I think that is all that the committee has to report.

PRESIDENT: Gentlemen, what will you do with the report. If there is any one who wishes to discuss the subject we will be glad to listen to them.

DR. A. W. GRAY: I can say that the definition at present as agreed upon by the optometrists and ourselves I believe would confine them absolutely to fitting lenses without the use of drugs. It is very doubtful if they could use prisms or any other appliances of any kind. It seems to me that it would confine them to fitting presbyopes and myopes and possibly some astigmatics; but their field of work would not be very broad, and I do not see how they would be able to treat any of the diseases of the eye whatever.

Personally from my investigation of the subject I would be very sorry not to see a bill of this sort go through. I really believe that regulation does not accomplish a great deal. At the present time Wisconsin is a dumping ground for optometrists, who are not willing to come up for examination in other states.

The fact that Ohio and Alabama and Pennsylvania have been able to defeat this legislation by veto or otherwise, does not alter the situation to my mind at all.

I think that we go on the wrong principle in regard to the regulation of the practice of medicine anyway. There was a rather illuminating article in the Journal of the American Medical Association, by Dr. Harris, of Chicago, on the subject. Much of it I do not agree with; but in Wisconsin I believe the principle of the regulation of medicine is practically the principle of the regulation of the use of the title of M. D. or Doctor, or any other title tending to give the impression that the individual is a practicing physician. We are not trying to keep individuals from practicing medicine. If we did we would throw out all masseurs, all Christian Scientists, all midwifes, etc., but we are trying to give a standing to the term Doctor and to the title M. D.; and that, I believe is the principle of regulation of practice in Wisconsin.

I personally hope the bill will pass in the condition in which it was left with the committee.

A. R. Craig, Assistant Secretary American Medical Association (Chicago), was then called for.

Dr. Craig: My opinion is that the position the American Medical Association has taken in the matter is the right one. It is dangerous to have any group of partly trained men legalized to act as physicians. Legislative recognition gives them a basis upon which to demand a more extended privilege at later sessions of the legislature. If these men would accept and be governed by a bill which defines their limited authority because of their partial training, possibly the act defining their trade might be warranted. However, it seems to me that when you give them this much they have the inch for which they will take an ell. The next time the legislature meets they have the advantage of an act and they will continue their efforts for unrestricted rights. In Pennsylvania, the effort to throw out legislation upon the subject of optometry has been successful. Of course, another fight is ahead. However, the optometrist is without legal standing, while here any bill recognizing them gives them a foundation on which to build. After certain features of a desired measure are enacted, it is comparatively easy to amend the act to conform to the draft first proposed.

President: I think this is a good subject to talk on. You can have all the time you want.

Dr. H. M. Brown, Milwaukee: I move that the report be received, placed on file and the committee continued.

Motion seconded, unanimously carried and so ordered.

President: We will now receive the report of the Committee on Publication, Dr. A. J. Patek, Chairman.

Dr. Patek read the report and it is as follows:

*To the House of Delegates, State Medical Society of Wisconsin.*

Gentlemen: As chairman of the Publication Committee I take keen pleasure and great satisfaction in presenting to you the report of this past year's conduct of the State Society's Journal.

The merits of the publication, when compared with similar publications of other State Societies, are known to all who peruse its pages. It brings not only good scientific material, but, through its county society columns, continues to cement friendly intercourse that breeds good will among the State Society's constituent bodies.

I cannot too highly commend the work of the editor, Dr. Myers. The excellent editorials and the general tone and character of the reading pages, redound greatly to his individual credit.

The financial statement, appended to this report, testifies to the excellent managerial capacity of Dr. McMahon. His generalship of the financial department has been excellent; the reduction of the Journal's cost to the Society from 10 to about 3⅓c per copy is the only encomium needed to establish the efficiency of the services he has rendered.

(Signed) ARTHUR J. PATEK,
*Chairman Publication Committee.*

## THE WISCONSIN MEDICAL JOURNAL.

FINANCIAL STATEMENT, JUNE 1, 1910, TO JUNE 1, 1911.

| | | |
|---|---|---|
| Cash balance, June 1, 1910 | $ 491.93 | |
| Received from The State Medical Society | 800.00 | |
| Collected from advertising | 3,593.90 | |
| Collected from subscription | 11.70 | |
| In payment of half tones, moneys advanced for collecting accounts, etc. | 14.00 | |
| | | $4,911.53 |
| *Disbursements.* | | |
| Equipment | 7.10 | |
| Printing | 2,576.20 | |
| Salaries | 1,312.00 | |
| Postage | 249.00 | |
| Current expense | 103.14 | |
| Commissions for securing $2,257.00 worth of advertising contracts from January 1, 1910, to November 1, 1910 | 600.90 | |
| Half tones, moneys advanced for collection of accounts, etc. | 27.33 | |
| | | 4,875.67 |
| Balance on hand June 1, 1911 | | 35.86 |
| *Assets.* | | |
| Equipment | 144.83 | |
| Bills Receivable | 1,080.76 | |
| Cash on hand | 35.86 | |
| | | 1,261.45 |
| *Liabilities.* | | |
| Bills Payable | | 855.50 |
| Surplus | | 405.95 |

## THE WISCONSIN MEDICAL JOURNAL.

STATEMENT OF EARNINGS, EQUIPMENT, EXPENSES AND CIRCULATION, JUNE 1, 1910, TO JUNE 1, 1911.

*Total Expenses.*

| | |
|---|---|
| Equipment | 7.10 |
| Printing | 2,375.10 |

| | | |
|---|---|---|
| Salaries | 1,302.00 | |
| Commissions for securing $2,093.20 worth of advertising contracts | 502.40 | |
| Postage | 251.95 | |
| Current expense and advertising | 111.27 | |
| | | 4,549.82 |

*Total Earnings.*

| | | |
|---|---|---|
| Advertising charged | 3,794.06 | |
| Subscription | 39.15 | |
| | | 3,833.21 |
| Deficit | | 716.61 |

*Circulation.*

To members of The State Medical Society ..... 21,275

The deficit of $716.61 minus the cost of equipment $7.10 leaves an actual deficit of $709.51 which represents the cost to The State Medical Society of circulating 21,275 copies of The Journal, or about 3⅓c a copy.

(Cost of each copy prior to the transfer of The Journal to The State Medical Society, 10c.)

ARTHUR J. PATEK,
G. E. SEAMAN,
O. H. FOERSTER,
SIDNEY S. HALL,
CHARLES S. SHELDON.

Motion made that the report be accepted and placed on file. Seconded, unanimously carried and so ordered.

PRESIDENT: We will now receive the report of the Committee on the Prevention of Tuberculosis.

SECRETARY: Dr. Harper is not able to be present, and I have not received the paper though I expect to do so.

PRESIDENT: That report will be passed for the present.

PRESIDENT: We will receive the report of the Committee on Necrology, Dr. Patek.

Dr. Patek then read the following report:

During the past year the Society lost through death 17 members.

Dr. Carl Bruck died on June 10, aged 54. He graduated at the Wisconsin College of Physicians and Surgeons in 1896. He was assistant physician at the Milwaukee County Hospital for the Insane, and had established himself in private practice in the City of Milwaukee.

Dr. Wiley W. Tartar of Mellon died August 17 at Ashland, as the result of severe burns sustained the day previously.

Dr. Emil Wahl, one of the best known physicians in Milwaukee, was accidently killed while hunting, on September 9th.

Dr. Geo. E. Vincent, president of the Tomah village board and a former

member of the legislature, died on September 18, aged 67, at Tomah, where he had been in practice many years.

Dr. M. D. Lane, Wautoma, formerly an active practitioner of the village, died on October 5th, of a paralytic stroke.

Dr. Fred N. Brett died on September 22nd, at Green Bay, aged 30. He was a graduate of Rush Medical College and was engaged in active practice in Green Bay.

Dr. Ernest S. Albee of Oshkosh died on November 2nd, of Bright's disease, aged 34. He had graduated at Rush Medical College in 1901.

Dr. Samuel H. Friend, died on October 30, aged 48. He was a graduate of the University of Pennsylvania, and later spent several years in Europe, where he devoted himself to the study of pathology. He was in active practice in Milwaukee for many years, but several years before his death developed a spinal disease, which later caused his death. Dr. Friend was a man of scholarly attainments. In his death the Milwaukee profession lost a man who had left a deep impression.

Dr. W. G. Nicholson, Green Bay, died on October 21, aged 41. He was a graduate of Rush Medical College.

Dr. Clarke Gapen, Madison, died of heart disease on September 17, aged 80. Dr. Gapen had served the public in various capacities and was well known as an alienist. He was at various times physician at the Wisconsin Hospital for the Insane at Mendota, Commissioner of Health at Omaha, Nebraska, and Superintendent of the Hospital for the Insane at Kankakee, Ill.

Dr. H. L. Rosenberry, Wausau, died suddenly on January 11th, aged 55. He was a graduate of Sterling Medical College, Columbus, Ohio, 1882, and had been practicing at Wausau since 1894.

Dr. B. O. Reynolds, the oldest practicing physician in Wisconsin, an honorary member of the State Medical Society, and a member of the Military Order of the Loyal Legion, died at his home in Lake Geneva, on January 19, aged 87 years. Dr. Reynolds suffered a stroke of paralysis in 1904, a second stroke finally causing his death. Dr. Reynolds graduated from Rush Medical College in 1851. He made his home in Walworth County in 1854 and remained there until his death. He took part in the Civil War and served with distinction in the 3rd Wisconsin Cavalry. He had been a member of the Senate and Assembly of Wisconsin, and was at one time a member of the State Board of Health.

Dr. Thomas Tomelty, died at his home on February 16th, of pneumonia, aged 47. He graduated in 1899 from Rush Medical College and had been practicing at Big Bend ten years prior to his death.

Dr. U. O. B. Wingate, died on February 18 of pneumonia, aged 63. Dr. Wingate was one of Wisconsin's most distinguished physicians. He enlisted in the Union Army at the age of 16 and served under Sherman. Returning from the War, Dr. Wingate entered Harvard Medical College, and later became a student at Dartmouth Medical College, from which institution he graduated in 1874. After practicing his profession at Wellesley, Mass., until 1876, he came to Milwaukee, where he had since resided.

Dr. Wingate was a former Health Commissioner of Milwaukee, and was for many years secretary of the State Board of Health. In his later years he devoted himself entirely to nervous and mental diseases.

Dr. L. B. Lewis, Sun Prairie, died suddenly March 20th, at Redlands, Cal., of paralysis, aged 65 years.

Dr. John B. Trowbridge died on March 20th after an illness of two years. Deceased was born in 1825, and took his degree in medicine at Rush Medical College in 1882. He practiced at Hayward for a number of years, and at the time of his death was president of both the Inter-County and Washburn-Sawyer-Burnett County Medical Societies.

Dr. H. A. Lathrop, Marshfield, died on April 23rd, aged 63. Dr. Lathrop was graduated from Hahnemann Medical College of Chicago in 1881, since which time he had been in active practice at Marshfield.

Motion made, seconded and unanimously carried that the report be received and placed on file.

PRESIDENT: We will now receive the report of the delegates to the National Legislative Council.

The report was then presented as follows:

*To the House of Delegates of the State Medical Society.*

GENTLEMEN: At the joint meeting of the Council on Medical Education and the National Legislative Council, held in Chicago, March 1, 2 and 3, 1911, we were fortunate in having at the same time and place the meetings of the Association of American Colleges and National Confederation of State Medical Examining and Licensing Boards.

During the past seven years the Council on Medical Education has studied the problems and conditions surrounding medical education, so that we are able to-day to get a clear idea of the situation as it stands.

While there has been a great advance in the medical schools in the United States, there are still a number that are far from reaching a satisfactory standard, but I believe the feeling of the members of the council was that the advance already made in this direction would continue until we shall have as nearly an ideal standard as it is possible to get. The opinion of the members of the committee was that the smaller colleges with their inadequate equipment will gradually drop out of existence or combine with larger colleges.

All the papers read, dealing with educational matters, covered a wide range of special subjects and tended to a higher standard and were of special interest to those making a study of this particular subject.

The tendency is toward a college course as a preliminary to medical study, with at least a year of hospital work following the course.

Along the matter of legislation during the past year, little has been done. The Chairman of the Council on Medical Legislation stated that he felt "we had not gone at our affairs with that determination to be coherent and loyal as we ought to be", and he suggested unless we got together on these matters and discontinued our individual opinions, we were going to be made prey for our opponents and legislative jugglers of one sort and another. With this I thoroughly agree. Our legislative committees and councils should hold frequent conferences, decide on some definite line of action and then follow it up carefully and conscientiously.

The Owen bill providing for a Department of Public Health, is practically the only National Medical Legislation being considered.

The Optometry bills are still taking up the time and attention of the different legislatures. A report of the committee on optometry states that at the end of 1909 twenty-four states had legalized optometry and they are this year asking for recognition from eighteen states.

How a great school could be so hoodwinked as to establish a chair in optometry it was felt was difficult to understand, and the optometrists cannot at the present time point to any other than the Columbia University as a recognized optometry school.

In the resolution that was passed it was resolved that the Seventh Annual Conference of the American Medical Association on Medical Education and Medical Legislation deplores the action of Columbia University, of New York, in establishing a course of study in Optometry, for the reason that opticians have never succeeded in founding an official school of optics or optometry, but have relied on the recognition or legalization of the word "optometry" to make them a profession and for the further reason that the existence of such a course at Columbia University has this year been used in many states as the chief argument for the further enactment of optometry laws which are designed to permit opticians to practice medicine in a limited degree.

The editor of the Department of Economics in the Journal of the American Medical Association said "Without stultifying itself, the State cannot establish two standards in the same branch of medicine. This bill (the optometry bill) puts a full fledged physician with years of preparatory and scientific study and final qualification before the State medical board against a tradesman with six weeks of special study. The State can not, in fairness to the profession or in the interests of the laity, lower present standards in ophthalmology. Nor will it do so if the legislator is properly instructed."

The whole proposition reduces itself to an absurdity, and its ridiculousness should be impressed on the members of our legislatures so as to put a stop to such farcical legislation.

The next conference on Medical Education and Legislation will be held in Chicago, February 26 and 27, 1912.

Respectfully submitted,

B. M. Caples,

*Member National Legislative Committee for Wisconsin.*

Report accepted and placed on file.

President: We will now receive the report of the delegates to the Council of Medical Education of the American Medical Association, by Dr. M. P. Ravenel, and the report of the committee to act with the Board of Public Instruction of the American Medical Association, by Dr. C. R. Bardeen.

In the absence of Dr. Ravenel and Dr. Bardeen the report will be read by the Secretary.

Secretary: Dr. Ravenel deputized Dr. Bardeen who is to give the report of the committee to act with the Board of Public Instruc-

tion of the American Medical Association, so that Dr. Bardeen attended both meetings, and has written a report for both meetings, and I will read them both.

They are as follows:

Madison, Wis., June 5, 1911.

*Dr. Charles S. Sheldon, Sec. State Medical Society of Wisconsin, Madison.*

DEAR SIR: As chairman of the committee to act with the Board of Public Instruction of the American Medical Association, I beg to report that there seemed to be no special occasion during the year for a meeting of the committee and that therefore the committee has not been called together. The Council on Health and Public Instruction of the American Medical Association has been actively engaged in promoting publicity along lines already started. Dr. J. N. McCormack has been active in promoting medical organization and the national council has been fortunate in enlisting the services of a number of men who have written articles defending animal experimentation at a time when unfortunate legislation has been threatened. In the New York legislature the violent efforts of the anti vivisectionists to get legislation restricting animal experimentation were once more successfully thwarted.

The Seventh Annual Conference of the American Medical Association on Medical Education and Medical Legislation under the joint auspices of the Council on Medical Education and the Council on Health and Public Instruction was held at the Congress Hotel, Chicago, March 1, 2 and 3, 1911.

At the conference on medical education papers were presented discussing preliminary medical education, the medical course and hospital year, and the State license for medical practice. These papers were unusually interesting, although perhaps the most interesting was that of Dr. E. P. Lyon, Dean of the St. Louis University School of Medicine, recently published in full in the Journal of the American Medical Association and well worth reading by every physician who has not yet done so. Nothing especially new was developed at this conference. Dr. N. P. Colwell presented his usually excellent summary of the progress of medical education in the various parts of the country.

On Wednesday, March 1, at 8. P. M., interesting papers on the relation of the State to medicine were presented by President-Elect Vincent of the University of Minnesota, President MacLean of the University of Iowa, and President James of the University of Illinois.

On Thursday, March 2, a number of very valuable papers were presented dealing with medical practice acts. There seems to be a growing conviction that our examinations for license to practice medicine should be made more practical as fast as the proper facilities can be developed.

Respectfully submitted.

C. R. BARDEEN.

The reports accepted and placed on file.

PRESIDENT: We will now take up the report of the committee to draft form of reports for county secretaries and councilors, Dr. J. M. Dodd, Chairman.

DR. DODD: I believe that committee is not ready to report, but will do so at a subsequent meeting.

President: We will give the committee more time.

PRESIDENT: We will receive the report of the chairman of the council, Edward Evans of La Crosse.

SECRETARY: Dr. Evans wrote a letter regretting sincerely his inability to be with us tonight, but his class in medicine at Toronto has an anniversary—I have forgotten the year—but it is a very important epoch and he felt that he must attend.

The letter is as follows:

*To the Members of the Council and House of Delegates of the State Medical Society of Wisconsin.*

GENTLEMEN: I am sorry, that during this year, of my service as president of the council, I have only apologies to offer to you.

I was unable to attend the annual meeting and now fealty to my alma mater calls me to her at this time of our annual gathering.

One of the great pleasures I have derived from medical practice has been my association with the best men of the profession in our state.

It has been a great pleasure to associate and work with men who have felt that they owe the community and state in which they live some of that special training and education which should and does fit the doctor for civic, as well as health, uplift.

I do not deem it proper, because of my absence to make any radical suggestions to this Council or House of Delegates; but there are some matters affecting the welfare of our society which I believe, it would be important for the council, constituted as it is,—the board of censors of the society—to take cognizance of.

It has occurred to me that we have in our society, perhaps, more organization of the medical profession than organization *in* the medical profession. There are many things affecting our standing in the community, and our ability to better the conditions of our community, which we could do much to forward, and which, I believe, should be initiated by the council. Better organization *in* the profession would help carry out those words.

The most crying need, at the present time, is, I believe to find some solution of the commission scandal. I do not intend to suggest to you a remedy for this; but it is one of those things that, if *we* do not attend to from *within* the public, and at our expense, will attend to, and I think before long, from *without.*

Many various views are held on the subject by as many various and equally conscientious men. Observations show that it is mainly or exclusively the general surgeon who is in the commission business. It occurs to me that the reason for this is that many graduates without special study, opportunity, or training hold themselves out as surgeons, contrary to the method used in all other specialties. These seek a short road to success by

the commission route. Surely the common sense of the profession should exact special training for the most exacting and serious of all the specialties, when it demands it in all other special branches.

I would suggest the appointment of a state-wide committee that would try to collect as much information as possible on the question to submit the same to the council at their annual meeting in January. Some plan might then be formulated whereby we might approach, if not reach a solution of this disagreeable question.

I am sure, too, that the medical society, through its legislative committee or otherwise, (and I think, myself, best through this council), should pay more attention to formulating, and introducing proper medical legislation, and then adopting such legitimate means as would ensure the placing on our statute books of such legislation.

Owing to my association on the Board of Regents of the University I have had considerable opportunity to observe legislation during the last eight or ten years, and no legislation affecting the welfare of the people of the State of Wisconsin is given as little attention, by those who for altruistic reasons are most interested in it, as is medical legislation, by the medical profession.

These matters present themselves to me at the moment as needing consideration by the medical profession of Wisconsin, and because of our official position in our society, I believe, it would be best for us to initiate any movement which would seem capable of solving those problems.

Thanking you very much for the honor you have done me during the past year and assuring you that all times in the future I shall be willing to work in the ranks with one and all of you, and wishing you the most successful annual meeting in the history of the Wisconsin Medical Society, I am,

Yours very sincerely,
E. Evans.

LaCrosse, Wis., June 2nd, 1911.

Report received and accepted.

President: We will now receive the reports of councilors of the different districts. The councilor for the first district Dr. H. B. Sears, is not present, so we will take the report of the Second District, Dr. G. Windesheim, of Kenosha.

It is as follows:

SUMMARY FOR 2nd DISTRICT.

| | | |
|---|---|---|
| Number of Members—Walworth County | 30 | and 5 honorary. |
| Racine County | 31 | |
| Kenosha County | 33 | and 1 honorary. |
| Total | 94 | and 6 honorary. |

Loss one which will probably be made up during the year.

Meetings held—Walworth County, 4; Councilor present at 3.
Racine County, 4; Councilor present at 4.
Kenosha County, 12; Councilor present at 12.

Attendance—Walworth, average 14, greatest 25, least 7.
Racine, average 16, greatest 21, least 12.
Kenosha, average 13, greatest 19, least 10.

Papers read—Walworth 13; Racine 8; Kenosha 21.

Scientific interest much improved and fraternal spirit of the best among members attending the meetings.

PRESIDENT: We will now hear the report from the Third District, Dr. F. T. Nye:

DR. F. T. NYE, Beloit: I have an idea that there is a rather peculiar condition in Sauk County in my district. A report came in yesterday showing that in 1910, they had 20 members, and in 1911 they have 24 members; and in the whole year there were no meetings held at all. That shows how we get ahead sometimes without doing anything. I thought that was a pretty good condition.

In Green County they have just about held their own.

SECRETARY: Green county has lost three; and Sauk County has gained four.

DR. NYE: Yes, that is the way I have it also.

In Rock County in 1910 they had 55 and in 1911, 60; a gain of 5. There are 19 that are eligible and nonaffiliated.

The average attendance has been 44, the greatest about 100, that is counting in the district meeting. The least number is 18. The meetings in Rock County are held monthly the same as they are in Madison, alternating in Janesville and Beloit.

There is another question that comes up here in regard to the scientific spirit. Last year we tried the post graduate course pretty thoroughly, but it seemed to demand so much work that they were hardly able to fulfill the contract. They started in very nicely, but were hardly able to live up to it. So this year they have been following a little different plan, going back to the old method of having outside people come in. For instance, Dr. Billings in January gave them a talk on infantile paralysis; and Dr. Ochsner and others came in and addressed the society. That seems to draw a larger crowd and evoke more interest than when they depend entirely on their home talent.

There is a question that I want to ask; I do not know whether this is the proper place or not; and that is the question of honorary membership. Dr. ———, of ——— has been a member something like 44 years, and he has not paid his dues this year or last. I do not know whether this is the proper place to bring it up or not, or whether it should be brought up at a later meeting. I consider him eligible for the honorary list.

DR. S. S. HALL, Ripon: It is customary and has never been questioned, to put such cases on the honorary list.

SECRETARY: We have no honorary members, and there is no warrant for it in the constitution. If there are such cases that is a matter for the individual society which wants to recognize the physician who has attained a certain age. That is all right, but they have no official recognition.

DR. NYE: I suppose the county society can do that.

PRESIDENT: I think there is no objection to your electing him an honorary member.

DR. H. M. BROWN: I understand from the Secretary that there is no provision for it.

SECRETARY: I referred to the state society, not the county society.

DR. C. A. ARMSTRONG, Boscobel: I would like to remind the Secretary that I was present at the House of Delegates at Madison, when Dr. Philler was made an honorary member of the state society.

SECRETARY: There was no warrant for it.

DR. BROWN: I do not think that question can come before this meeting. If the constitution does not provide for the existence of honorary members, how can we make him an honorary member? You might as well try to make him a camel.

PRESIDENT: That will be a matter properly for the county society.

Report accepted.

Report of the Fourth District, DR. W. CUNNINGHAM, Platteville:

I have a report from all except Richland.

The number of members in 1910 in Grant County was 36; in Crawford, 11; in Lafayette, 18; and in Iowa, 9.

Number in good standing in 1911, Grant, 41; Crawford, 11; Lafayette, 16; Iowa, 7.

Gain or loss: Grant gained 5, Crawford gained 0, Lafayette lost 2, Iowa lost 2, making a net gain of 1.

Eligible, but not affiliated: Grant 7, Crawford 5, Lafayette 4, Iowa 15.

Number of meetings held in each of the counties 3, with the exception of Lafayette, 2.

Average attendance about 50 per cent. of the membership.

Number of papers read during the year: Grant 8, Crawford 5, Lafayette 8. Most of them meet every four months.

Scientific interest reported as increased in half of them. Professional spirit markedly increased in all.

It is a notable fact that the larger the membership of the county the larger and better the meetings. The counties which have smaller memberships have small attendance. The interest is lacking more in the smaller county than it is in the larger county. I think it is from the fact, as has been brought out today, that the more frequently we get together and the more the men get together in general, there is an increased feeling of fellowship, and there is a greater interest in the meetings, and the meetings are surely very much better. That is where the small county with the small membership is at a disadvantage. I would like to report the general professional spirit as being very much improved throughout the district.

5th District, G. V. Mears, Fond du Lac, passed.

6th District, H. W. Abraham, Appleton: Brown and Kewaunee counties had a combined membership in 1910, or 34; 1911, 31; loss of 3: Two are accounted for by death. There are 8 delinquents which have not been rounded up yet, but probably most of them will be. There have been 5 meetings and 5 papers read. The average attendance has been 12, the greatest 15, the least 9.

Door county has been the stumbling block of the councilors previous to myself. It has been passed from one district to another and back again; but nobody has succeeded in doing anything with them. They have had but one meeting in two years. There are only 8 members in the county. They are so badly separated that it is difficult for them to get together, and they wont get together. This year there has been no report to the State Secretary or to the councilor. Even after repeated telephonings and writing of postals, etc., we get no answers.

My recommendation would be that this county of only 8 members be attached to Brown-Kewaunee, making it Brown-Kewaunee-Door. Then there would be an organization, at least, to go after them. The Secretary they have had, has made no effort to get them together, even with all the help offered and given him, and it seems to me the one way to keep them in, even if they cannot have a meeting, is to attach them to other counties.

Winnebago county has not given a report to the councilor; but I think the Secretary has the report. There are 8 delinquents.

Secretary: There is a loss of 6 as compared to the totals of last year.

Dr. Abraham: The trouble there is that Oshkosh has a city society which meets every month, and has a very good society and very well attended; but it does not take in all the members of the county society. Considerable effort has been made by the previous councilor and myself and some of the members to change that into the county society; but the members do not seem to want to do that. So they have only had one meeting this year of the county society. But the city society does good work and has very good scientific programs monthly.

Outagamie Society is the best organized in that district by far; and as far as I can see, is an ideal society. They have 6 meetings a year, meeting regularly every two months; and their program is always complete; there has never been a failure on a paper. The membership is 37 this year and 40 last year, seemingly a loss of 3; but that is accounted for by two removals, and one who had become ineligible.

We have made a rule for some time in that county that any practitioner who takes contract practice of any kind, that is, if he is an "Eagle" doctor or a "Moose" doctor, or does any contract work, he is ineligible for membership in the society; and in that way we have kept out those organizations. Only one does it, and they are trying to get rid of him. We have practically annihilated contract work in mills, etc., and everybody is getting his share of the work. (Applause.) The one man who has become ineligible took up the work of the small insurance companies, like the Metropolitan and the Prudential. To do that work also makes a man ineligible. Practically the work will be weeded out in another year altogether, so that those companies cannot do work up there.

The average attendance has been 16, membership 37, greatest 25 and least 12. Every one of the meetings has been enthusiastic. They meet in 5 different places in the county, ranging from 14 to 20 miles away from the main center; and I think it can be held up as one of the ideal county societies. If we can only get the rest of our district in the same condition we will feel perfectly satisfied, but the bad condition of the rest of the district makes up for the good of this one.

Report accepted.

Report of the 7th District read by the Secretary as follows:

La Crosse, Wis., June 1, 1911.

*Dr. C. S. Sheldon, Secretary of State Medical Society of Wisconsin.*

Dear Doctor: I herewith submit my report, for the year 1910 and 1911, of the seventh councilor's district.

The reports of the various secretaries are, in some instances, not as complete as they should be, and therefore my figures are subject to some revision, perhaps.

According to those reports we have in the seventh councilor district ninety-nine members in good standing, while there are thirty-six eligible and non-eligible physicians who are not members.

As in previous years Vernon County is the one most poorly organized. Here there has been, I believe, no meeting properly so-called for two or three or more years, and while there are nine members in the county, there are some thirteen who are eligible and not members.

I have no suggestions to make about this county.

I should like to see a new councilor appointed for the seventh district with the hope that he could do more with Vernon than I have been able to do.

Juneau is fairly well organized but has only two-thirds of the doctors in the county belonging to the County Medical Society.

Trempealeau-Jackson-Buffalo, considering the great extent of its territory is very well organized, and has twenty-two members, while there are ten non-affiliated.

La Crosse and Monroe are well organized; La Crosse having thirty-two members of the county society, five eligibles not belonging.

Monroe has twenty-three members, two eligibles not enrolled.

During the year I visited all the annual meetings in my district except Trempealeau-Jackson-Buffalo; and I was out of the state at the time of their annual meeting.

Vernon had no meeting and so could not be visited. In the counties where I have visited, the spirit is good, and as your honored secretary would say "brotherly love and good fellowship prevails".

Respectfully submitted,

E. Evans,

*Councilor of Seventh District.*

Report of 8th District.

T. J. Redelings, Marinette (8th District.): My report covers Marinette, Oconto and Shawano. I could not get any reply from the Secretary at Shawano, so I have no report from that county.

Secretary: It is the same as last year, 14.

Dr. Redelings: Oconto reports 8 members, 4 delinquents and 5 who

have not been members of the county society, a loss of 4 this year; and I hope those members will come in with their dues later. Marinette county has 22 members in good standing this year as against 21 last, and we have placed one of the old men on the list as an honorary member, a very worthy man, and that really takes out one of the number of our total. We hold meetings monthly, alternating with the county of Menominee. Our own meetings are really only 6, because we meet in Marinette one month and in Menominee, Michigan, the alternate month.

Our meetings are well attended. The quality of papers has been excellent. The fraternal spirit among the men who are sustaining the society, is superb, but we fail to reach the men in the outskirts. The society is maintained by the physicians of the two cities of Marinette and Menominee.

We have been utterly unable to get in six of the men who are eligible, but who are not members. Every means has been brought to bear that I can think of. I have assigned the work to individuals who seem to have a pull. I took my pointer from the manner in which the church people work their benevolent schemes. They send an individual around who has some kind of a pull. So I tried to find individuals who were close to these men and to reach them in that way; but we have been unable to get in those who are eligible and not members.

Marinette county also has refreshments at every meeting. We have a kind of a jolly good time; sometimes it is at the restaurant, sometimes at a hotel and sometimes it is in an individual home, and judging from my own feelings I would say that the active membership of the Marinette-Menominee County Medical Society has developed into a very warm and genial friendship, and the spirit is excellent and the work is superb.

We held two public meetings, both of which were largely attended, and I am very sure were very helpful to all who were present at the meetings. Our efforts were supported by lantern slide demonstrations, showing that the individuals who were on the program made more than ordinary efforts to elucidate the subjects on which they were speaking.

Report accepted.

The representative of the 10th District was not present.

Report of 11th District.

Dr. J. M. Dodd, Ashland (11th District): The condition in the extreme northern part of the state remains about the same as it has been all these years since the organization took place. We have about the same number of doctors and about the same number of members.

Oneida-Forest-Vilas, for instance, reports a gain of two during the past year; Price-Taylor a gain of one; Ashland-Bayfield and Iron loses one. That loss may be accounted for by a doctor saying that he guessed he would not pay his dues any more, and as he has been sick lately, we could not press the matter very much. Langlade reports the same number. Langlade is one of the best county societies we have in that district. The Secretary, Dr. Wright, who is present, is one of the best secretaries I have in my district. He reports that there is only one doctor in his county that is not a member of this society, and he is working very diligently on him, with a fair prospect of landing him as a member in the near future.

Situated as we are, the distances are rather great, and there is considerable difficulty in the way of getting meetings and getting out an attendance to the meetings; but with all the difficulties that we have in the way, there is a very fair professional spirit, and very good work being done.

That northern country, as you know, is in a stage of transition. Men are more or less unsettled, they do not know whether they are going to stay there or move into some other field, and that unsettled state of mind is not conductive to the best medical society spirit, and adds somewhat to the difficulties we have to contend with up there.

Report accepted.

Report of 12th District.

SECRETARY: Dr. Dearholt has asked me to report on the 12th District. The total number last year was 283, the total number who have paid this year is 260. This makes an apparent loss of 23. But I will say in deference to the opinion of Dr. Hopkinson who compares the present number with the number at this time last year, which would make a gain of about 40, inasmuch as between 60 and 70 were taken into the society after the last annual meeting; and he promised to do as well as that this year, and if he does the Society will show a gain of 30 or 40, which we hope will prove true.

As far as the statistics are concerned, the number of non-affiliated men is 300. There is a large field there. The number of meetings during the year was 9, the average attendance 70, the number of papers average 13. He reports that the scientific interest as well as professional spirit are improving. There were two visits from the councilor.

Report accepted.

PRESIDENT: The next order of business is a very important one—the report of the Treasurer.

It is as follows:

TREASURER'S REPORT.

Waukesha, Wis., June 6, 1911.

S. S. HALL, TREASURER, IN ACCOUNT WITH THE STATE MEDICAL SOCIETY OF WISCONSIN.

*Debtor.*

| | |
|---|---|
| Balance on hand June 21, 1910 | $2,430.08 |
| Received from Secretary for County Society Dues | 3,279.75 |
| Total | $5,709.83 |

*Creditor.*

| | | |
|---|---|---|
| 1910— | | |
| Wisconsin Medical Journal | | 800.00 |
| June 22—F. T. Nye, Councilor Expense | $11.80 | |
| June 23—H. B. Sears, Councilor Expense | 8.75 | |
| June 23—J. M. Dodd, Councilor Expense | 43.00 | |
| 1911— | | |
| June 1—O. T. Hougen, Councilor Expense | 13.07 | 76.62 |

| | | |
|---|---|---|
| June 25—C. S. Sheldon, Expense | 85.12 | |
| July 6—Parsons Ptg. Co | 60.25 | |
| July 16—Dr. R. M. Pearce, Expense | 61.55 | |
| Aug. 20—L. Rock Slyster—Deficit Secy. Banquet | 48.00 | |
| Sept. 3—Dr. A. S. Loevenhart—Expense Delegate Pharmacy Convention | 50.00 | |
| Sept. 5—Goodwin & McDermott, Reporters | 266.40 | |
| Sept. 27—Tracy, Gibbs & Co., Printing | 2.75 | |
| Oct. 24—Dr. J. C. Bloodgood, Expense | 57.40 | |
| Oct. 24—Dr. O. H. Forester, Expense | 13.50 | |
| 1911— | | |
| Jan. 6—Parsons Printing & Stationery Co | 16.25 | |
| Jan. 6—C. S. Sheldon—Salary 1910-1911 | 300.00 | |
| Jan. 6—S. S. Hall—Salary 1910-1911 | 125.00 | |
| Jan. 6—S. S. Hall—Postage and Expense | 20.00 | 1,106.22 |
| Total | | $1,982.84 |
| Balance on hand | | 3,726.99 |
| Total | | $5,709.83 |

Respectfully submitted,

SIDNEY S. HALL, *Treasurer.*

## TREASURER'S REPORT.

Waukesha, Wis., June 6, 1911.

S. S. HALL, TREASURER, IN ACCOUNT WITH THE STATE MEDICAL SOCIETY OF WISCONSIN. MEDICAL DEFENSE FUND.

*Debtor.*

| | |
|---|---|
| Balance on hand June 21, 1910 | $2,737.14 |
| Received from Secretary | 1,572.50 |
| Total | $4,309.64 |

*Creditor.*

| | | |
|---|---|---|
| 1910— | | |
| July 25—Lines, Spooner, Ellis & Quarles | $ 771.20 | |
| 1911— | | |
| Feb. 11—Lines, Spooner, Ellis & Quarles | 1,408.81 | $2,178.01 |
| Total | | $2,178.01 |
| Balance on hand | | 2,131.63 |
| Total | | $4,309.64 |

Respectfully submitted,

SIDNEY S. HALL, *Treasurer.*

The undersigned constituting the auditing committee have examined the

vouchers and accounts of the treasurer and we are satisfied that they agree with his report as read to the House of Delegates.

H. W. Abraham,
Hoyt E. Dearholt,
E. V. Mears.

June 7, 1911.

President: The Auditors' report is attached to the Treasurer's report, and will be received and filed.

Reports accepted.

Report of Secretary read by the Secretary.

It is as follows:

## SECRETARY'S REPORT FOR 1911.

The Secretary begs leave to submit the following report for 1911. This is the 7th year under our present plan of organization and this report will treat of the progress of the Society during the past year. The number of component County Medical Societies is 53—the same as last year. At the Annual Meeting, for the first time, we were able to state that all of these 53 Societies, including Door and Price-Taylor had sent in their Annual Reports. At that time they all seemed to be in a very satisfactory condition, and the hope was expressed that we should have no more trouble in maintaining the separate organizations.

It must be confessed that up to this time this hope has not been fully realized, since in spite of numerous and urgent invitations, not all have reported. This, perhaps, may be partly accounted for by the fact that our meeting this year is somewhat earlier than usual and the County Secretaries have not had so much time to get in their collections. We have the year before us, however, and I have no doubt that further effort will secure an Annual Report from all of our 53 Societies. I do not feel very sanguine about Door County, but shall hope for the best.*

As to the 51 Societies which have sent in their reports, the record is not wholly satisfactory, if we are to regard these reports as complete and final. A majority show a loss, as compared with a year ago while the gains are few and small in amount. The Counties showing the largest losses are Milwaukee 30, Dane 16, Barron 11, Dunn-Pepin, Jefferson and Winnebago each 6, Columbia-Washington and Marathon each 5, and Brown, Dodge, Eau Claire, Iowa and Vernon each 4.

No other Counties have lost more than 3.

The Counties making a gain are Chippewa 5, Sauk and Grant 4, and Clark, Douglas, Green Lake-W.-Marinette, Oneida, Portage, Waukesha and Waupaca, each 2.

11 Counties show a gain, and 34 a loss, while 6 are the same as last year. Last year, at the Annual Meeting 39 Counties showed a gain, 8 showed a loss, while 6 were the same as the year previous.

The number who have paid their dues for 1911 is 1,493. One year ago,

*After this report was read, and during the Annual Meeting, reports were received from both Richland and Door Counties. Richland reporting 10 members and Door 8. This made the record complete as it was the year before.

at the Annual Meeting, it was 1,549, a loss of 56. The total membership of 1910 was 1,606. The total membership of 1909 was 1,505, a gain of 101 over the preceding year.

### MEDICAL DEFENSE.

Our plan of Medical Defense, which has now been in operation 3½ years, has been steadily growing in favor, and is now one of the most attractive features of the Society. Numerous applications for defense have been received during the year and the protection for the members has been entirely satisfactory. Most of the threatened suits have been nipped in the bud, and thus far no damages have been assessed against any member since the adoption of the plan. With the exception of two Counties, the payment of Medical Defense dues has been practically unanimous, and, in these cases, there was evidently no effort on the part of the County Secretary to collect them. We shall be happy this year to hear a discussion of Medical Defense, at first hand, from our legal representative, Mr. Spooner.

### THE JOURNAL.

During the past year the Society has owned and conducted its own Journal. Under the able management of Dr. Myers and Dr. McMahon, it has fully maintained its previous high standards and the report of the Publication Committee will show that the plan has worked out most satisfactorily.

However, it is still too much of a local institution, inasmuch as it is not utilized as it should be by the membership at large. Not only should the councilors and County Secretaries appear oftener in its columns, but the membership at large should bear in mind that the Journal is their own possession and should endeavor to add to its usefulness and interest by personal as well as professional communications.

### THE COUNCIL.

The Annual Meeting of the Council was held Dec. 31, 1910.

There were present Councilors Redelings, Windesheim, Hougen, Mears and Dearholt. The Secretary reported the total membership of 1910 to date 1,607. Several successful district meetings were reported and it was the sense of the Council that one or more district meetings should be held each year in each district.

Dr. Edward Evans was elected Chairman of the Council, Dr. S. S. Hall, Treasurer, and Dr. C. S. Sheldon, Secretary.

### THE YEAR'S PROGRESS.

The usual information blanks have been sent to the County Secretaries and 35 replies have been received. The replies are not materially different from those in former years. They are largely colored by the view-point and essential character of the individual Secretary, and especially by the measure of interest he has in the work. If he has accepted the office in good faith, and with the right spirit, if he has efficiently performed his duties in maintaining the organization—in stimulating and fostering an interest in scientific work, and in doing everything in his power to promote the welfare and sue-

cess of the Society, the results of such efforts are manifest in the conditions he has to report, and the note is cheerful and encouraging. If, on the other hand, his work has been done in a perfunctory and half-hearted way, with but little thought or persistent effort, the Society suffers accordingly, and its condition is shown in the report.

This is said with a full realization that the conditions vary much in different localities, and that in sparsely settled Counties, with physicians widely separated, the difficulty in maintaining the organization and doing good scientific work, is fully recognized. All in all, we are justified in entertaining an optimistic view of the conditions existing in the 7th year of our work under the new plan of organization. The great majority of our 53 County Societies are on a solid foundation for future success and usefulness, and there is constantly an increasing appreciation of the absolute necessity of such institutions if we are to make the best progress as a profession.

With these reports as a basis, it would appear that at least 30 Societies are doing good work, with good programs and a sustained interest, about 14 are doing some scientific work, while the rest simply maintain an organization by a yearly meeting for the election of officers.

STATISTICS.

In the 35 replies received, 2 Societies report 12 meetings in the year. 5, 9 meetings; 1, 8; 1, 7; 3, 6; 4, 5; 9, 4; 5, 3 and 1, 5. The average number of papers presented during the year averages about 9. A majority of the Societies are of the opinion that the scientific interest as well as the professional spirit are on the uplift.

The first Annual Conference of County Secretaries was held at the time of the last Annual Meeting, and was pronounced a success in every way. The attendance was large and the interest fully sustained. Secretary Simmons of the A. M. A., was present and heartily commended the project. The various phases of County Medical Society work were discussed, and the meeting was especially valuable as affording an opportunity for a better acquaintance among the workers in the field, and a more definite understanding of the duties and responsibilities pertaining to the office of the County Secretary.

An excellent program has been prepared this year by Assistant Secretary Sleyster and President Murphy, and Assistant Secretary Craig of the A. M. A. have promised to be with us. We hope and expect to have even a better time and a better meeting than we had last year.

There is still a lamentable delay on the part of some of the Secretaries in sending in their Annual Reports, due to various causes, which the State Secretary with all the severity at his command has not been able to correct. In some cases a good Secretary has been displaced by a successor who does not know his duties or does not appreciate their supreme importance. Or, in some cases, it is simply procrastination, putting off the collection of dues till the last moment and allowing too little time for the necessary work. I wish to urge once more, the necessity of beginning the work of organization promptly at the first of the year and pushing it vigorously till done. It must be done at some time, and it is much better done early, and it need not severely conflict with other work if the matter is on the Secretarial mind.

These remarks do not apply to the great majority of the County Secretaries, I am happy to say, since they constitute a body of men and women (especially women. I can't say too much in praise of Dr. Glasier of Grant, and Dr. Susan Jones of Racine and Dr. Read of Fond du Lac, and these Counties are wise in keeping them just where they are) a body of men and women I say, who are thoroughly loyal and faithful in every way, and to work with whom, I esteem a great privilege.

Neither does it excuse the flagrant and inexcusable negligence shown by so many of the membership in paying no attention whatever to the repeated notices sent them by the County Secretaries to pay their Annual dues. After all, these are the worst offenders.

On the whole, we may begin the work of another year with the conviction that we are making substantial progress as a Society and as a profession. Though fewer have paid their dues for 1911, then was the case at the last meeing for 1910. I fully expect the total membership of 1911 will show a gain over 1910. The quality of the Medical profession is constantly improving. Our ranks are being recruited with men of better training and with better professional ideals which assuredly come with it. This educational uplift will certainly continue and will, inevitably, affect most favorably the work of our Medical Societies. Once more we can truthfully say that the profession of the State is united and harmonious. There are no factions nor politics that are apparent. We have come to another Annual Meeting, with an excellent program, in a beautiful place, with, we hope, cooler weather, and all other things propitious. Let us resolve to make the meeting the best one yet, and the coming year a grand triumphal procession.

In behalf of the Society, the Secretary wishes to thank all who have aided in the year's work.

Respectfully submitted,

CHARLES S. SHELDON.

The Secretary made the following comments while reading his report: As to Door County I learned today that my communications to the Secretary, Dr. Doherty, were not answered, because he was not the present secretary, and that the Seeretary of the Society is out of town.

As far as Door County is concerned, we tried the expedient of attaching the weak counties to some other stronger counties, but it amounts to the same thing. We cover it up by not mentioning the names, but ordinarily we do not get any more members, as a rule, than we do when we leave them to separate organization. Door county preferred to have its own society and reported a membership of 6 or 8, and promised to do it this year but they have not. We have one man who sent in his dues, and that is all. But the other 51 counties have reported.

Report accepted.

PRESIDENT: We will take up order No. 18, which is as follows: Election of Delegates and Alternate to A. M. A. to succeed L. F. Bennett and F. S. Wiley.

SECRETARY: We are entitled to three delegates to Los Angeles. I expect to go as one of the delegates, Dr. Bennett and Dr. Levings, the other two delegates, are not able to go. Dr. Cunningham is not certain whether he can go or not. So far as the other alternates are concerned, Dr. Sayle is not able to go, and I have not heard from Dr. Wiley, but I think he cannot go, so that out of the 6 delegates and alternates only one is sure to go. It is entirely competent for this meeting, as Dr. Craig tells me, to elect two delegates in their place. We can secure the resignation by telephone or other means of the present delegates, which would make it entirely legal, and what we want to ascertain now is the names of two representatives who are sure to go. Dr. Ravenel, of Madison, assured me that he would be glad to act as delegate if the House saw fit to elect him. How is that, Dr. Craig?

DR. CRAIG: I do not see how you can elect a man to an office which is already filled. However, I do not see anything to prevent your electing as alternates men who will take the place of the delegates who are unable to attend. Your by-laws read you shall elect delegates and alternates according to the laws of the American Medical Association, which are that you shall elect delegates for two years from the state society. If you elect alternates and then have the credentials that are held by your principal representatives tranferred to the alternates who are going, they would be regularly elected alternates, taking the place of the principal delegates in the House.

DR. W. T. SARLES, Sparta: Dr. Sayle wishes to offer his resignation, and he is unable to go.

Motion made and seconded that the House accept the resignation of Dr. Sayle.

Carried unanimously.

Dr. Cunningham moved that Dr. Ravenel be elected alternate in place of Dr. Sayle.

Motion seconded and unanimously carried.

SECRETARY: I move that an additional alternate be elected in case Dr. Cunningham should not be able to go, to take his place. Dr. Craig, who is an authority on everything connected with the American Medical Society, says that it is entirely legal.

DR. CRAIG: Have you in your constitution a limited number of alternates? If there is no such limitation, I know of nothing to prohibit you from electing two or more alternates for any position.

DR. DODD: It says it shall elect representatives to the House of Delegates of the American Medical Association, and it does not say how many.

DR. CRAIG: If you read that as giving the right to elect more than one alternate, the American Medical Association will not refuse to receive representatives elected by the Wisconsin Society.

PRESIDENT: I think we can elect as many alternates as we choose.

SECRETARY: I move that Dr. B. M. Caples, of Waukesha, be elected as alternate to Dr. Cunningham.

Motion seconded and unanimously carried.

SECRETARY: We must elect a delegate and an alternate for Dr. Wiley for next year. Probably Buffalo will be the place of meeting, will it not?

DR. CRAIG: Four places have been asked for, all in the middle west or east. I cannot say about that, however.

PRESIDENT: Nominations for delegate in place of L. F. Bennett as a delegate for two years beginning next year, are in order.

DR. WILKINSON: I nominate W. T. Murphy as a delegate.

Dr. Pember of Janesville, nominated as a delegate.

Dr. Wilkinson nominated by the Secretary.

Dr. Wilkinson declined.

PRESIDENT: There are 3 nominations. Vote for one.

Dr. Armstrong acted as teller.

Ballot was taken and President announced ballot.

PRESIDENT: J. P. Pember has received 8 votes. M. R. Wilkinson 3 votes. W. P. Murphy 6 votes.

There is no choice. You will again prepare your ballots.

DR. P. H. MCGOVERN, Milwaukee: I move that the rules be suspended, and, that the man who received the highest number of votes be declared delegate, and the man who received the next highest vote be alternate.

Motion seconded and unanimously carried.

PRESIDENT: Then Dr. Pember is elected delegate and Dr. Murphy alternate.

PRESIDENT: We will take number 19 up as follows: Election of councilors 1st and 2nd districts to succeed H. B. Sears and G. Windesheim.

DR. SARLES: I move that the candidates be re-elected.

DR. SEARS: I decline.

DR. WINDESHEIM: I have no objection to Dr. Sears being re-elected, but for the last 6 years I think I have done as much as I ought to for the society, and I respectfully request that my name be not considered as a candidate for councilor for the next 6 years. There are other men in the district who would make better councilors than I. There are men living in localities from which it would be easier to visit the various county societies than it is for me to visit them, inasmuch as I live way down in the southeast corner of the district. There are three delegates present from my district, and I should like to have them express their desire in regard to who they want as councilor.

DR. FULTON: Dr. Windesheim is the unanimous choice for councilor in Racine. He agreed to stay.

DR. SEARS: I think it would be better to have some one else than myself from a different part of the district.

SECRETARY: Whom do you suggest?

DR. SEARS: I think it would work better if some one was chosen from this part of the district. I am not unwilling to serve the society, but I am satisfied that I am not the best one for the work; and, while I have done the best I could during the last 7 or 8 years, I am sure there are others who can render better service than myself. I think it would be better to choose some one from this part of the district, because they can visit the county meetings with less inconvenience than I can. It spoils two days sometimes to visit some of the counties. I think Dr. Wilkinson would be all right, and I suggest his name.

DR. WILKINSON: I have my hands full now, and I think this part of the district is perfectly satisfied with Dr. Sears. Perhaps he has reason to complain that we have not assisted him as much as we should have done, but I would like to see him serve at his post again. If he cannot lead us perhaps he can drive us. I would like to see him re-elected.

DR. SEARS: I would prefer not to serve. I do not think I am accomplishing as much as some one else would, and I feel that I have done my duty, and while I am not going to stop working for the interest of the society, I would much prefer not to serve again.

PRESIDENT: So far as Waukesha county is concerned, we are entirely satisfied with Dr. Sears, but if he does not want to serve, that is a different matter.

SECRETARY: We appreciate Dr. Sears' valuable services during these last 6 years. Of course he has been faithful, earnest and sincere and honest, an upholder of the very highest ethical standards in every way, shape and manner; and we have been benefited and inspired in many ways by his presence. I feel, however, that we perhaps ought to yield to his preferences in the matter, if he has fully decided that he is unwilling to serve another 6 years; and I move that Dr. Wilkinson be nominated for councilor of the First District.

Motion seconded.

DR. WILKINSON: I cannot serve, and this is a hasty act. If you would defer it, it would be better to let the local society have something to say in regard to it. I could make a much better selection than you have made.

SECRETARY: How do you know?

PRESIDENT: I do not think you could, Dr. Wilkinson. You had better accept that.

DR. WILKINSON: 6 years is a long time.

PRESIDENT: You can resign if you get tired of it. Try a year, and if you do not want to stay we will let you out.

There is a motion before the House that Dr. Windesheim and Dr. M. R. Wilkinson be elected councilors for these two districts.

Carried.

PRESIDENT: The next order of business is the election of committees and delegates: (a) Committee on Public Policy and Legislation.

SECRETARY: I move that the committee of last year be continued for another year.

Motion seconded and carried.

The committee is as follows: A. W. Gray, Milwaukee, J. P. McMahon, Milwaukee, F. F. Bowman, Madison.

PRESIDENT: Next (b) Committee on Prevention of Tuberculosis.

Motion made and seconded that the committee be continued.

Unanimously carried.

The committee as continued is as follows:

C. A. Harper, Madison.

G. E. Seaman, Milwaukee.
J. M. Beffel, Milwaukee.
M. P. Ravenel, Madison.
C. H. Stoddard, Milwaukee.

PRESIDENT: Next (c) Committee on Medical Education.

SECRETARY: I move that the same committee be continued for another year.

Motion seconded and carried.

The committee as continued is as follows:

E. S. Hayes, Eau Claire.
Edward Evans, La Crosse.
W. H. Washburn, Milwaukee.

PRESIDENT: (d) Committee on Necrology.

Motion made and seconded that it be continued.

Unanimously carried.

The committee as continued is as follows:

A. J. Patek, chairman, Milwaukee.
E. L. Boothby, Hammond.
J. C. Reynolds, Lake Geneva.

PRESIDENT: (e) Committee to act with Board of Public Instruction A. M. A.

Motion made and seconded that the committee be continued.

Unanimously carried.

The committee as continued is as follows:

C. R. Bardeen, Madison.

PRESIDENT: (f) Delegate to National Legislative Council A. M. A.

SECRETARY: I move that Dr. Caples go next year as usual.

Motion seconded and carried.

PRESIDENT: (g) Delegate to Council on Medical Education A. M. A.

Motion made and seconded that the delegate be continued.

Unanimously carried.

The delegate is Dr. M. P. Ravenel, Madison.

PRESIDENT: We will next take up item 21: Election of Committee of 12 on nominations, one from each district.

First, H. B. Sears nominated; Second, W. A. Fulton; Third, L. R. Head; Fourth, Charles A. Armstrong; Fifth, S. S. Hall; Sixth, H. W. Abraham; Seventh, Henry A. Jegi; Eighth, R. C. Faulds;

Ninth, Joseph F. Smith, of Wausau; Tenth, A. Egdahl; Eleventh, J. C. Wright; Twelfth, R. G. Sayle.

Motion made that the Secretary cast a ballot for these candidates under suspension of the rules.

Seconded, unanimously carried and so done.

DR. WINDESHEIM: The man elected from the Second District is absent from the room, and I think it would be well, if this committee is to meet tonight, to have another man from the Second District put in his place.

DR. HALL: We can meet tomorrow.

DR. CHARLES A. ARMSTRONG, Boscobel: They say that the Secretaries are the life blood of the county societies, and I do not see why the Secretary of the State society is not the main source of life-blood for the state society, and as there will be a meeting in Los Angeles of the Secretaries of the State Societies I move you that this State Society send our secretary there as our representative, and pay his expenses.

PRESIDENT: It is moved that the Society send Dr. Sheldon to Los Angeles and pay his expenses.

Unanimously carried.

PRESIDENT: So ordered.

SECRETARY: I am very much obliged to the gentleman who made the motion, and I am exceedingly obliged to the society for their very generous offer in this regard, and I really wish I could accept it, but I really do not feel that I could consistently, but I thank you just the same. I do not feel as if I ought to. I have got to go anyway, you know, and I feel that it would be better if I am going not to accept a favor of that sort, at present, but I might accept it some other time. I am very thankful to you, but I must decline the offer at this time.

DR. M. R. WILKINSON, Oconomowoc: I would like to bring up a matter in regard to honorary membership. Our members grow old and quit their professional work, and it is a pretty poor organization that will strike them from the rolls as members not in good standing. I think that we all should have respect for their years of service and advanced age, and recognize their right to be made honorary members. None of us can defy time, and some day we will all reach the same state. I think we should take such action as is necessary, even if it is necessary to amend the constitution, to arrange for having an honorary membership to this society. I am not pre-

pared now to offer any resolution, nor do I know that it is the proper time, but I think it is something which should be taken up at the proper time and acted upon.

T. J. REDELINGS, Marinette: It occurs to me that we have been electing honorary members to this Society for the last 10 or 12 years, and the men who have favored us with the courtesy of annual addresses have been elected honorary members of our society. I recall several instances of that kind where the minutes will show such action was taken, and if that action was an error, our minutes are incorrect. I remember definitely when Dr. Wyllys E. Andrews, of Chicago, gave us his address on hernia, that I made such a motion myself, which was promptly seconded and enthusiastically carried, and he was declared an honorary member of the organization; and I feel reasonably certain that the same type of motion was made as a courtesy, embodied in the vote of thanks to the special speaker of the meeting on several other occasions, although I am not so positive as I am of the instance of Dr. Wyllys E. Andrews. Out records are faulty if no honorary list has been maintained.

SECRETARY: I think Dr. Redelings is entirely correct in his statement. It has been usual to compliment the speakers who come here from abroad by electing them to honorary membership, and I spoke of it as I did, because there is no warrant in the constitution for the general adoption of the rule. I entirely agree with Dr. Wilkinson that this is an entirely proper proceeding.

DR. HALL: It is established by precedent.

DR. SARLES: Your county society is your only record of membership.

SECRETARY: The membership in the county society is the only one for membership in the state society.

DR. SARLES: It would be simply honorary.

DR. ARMSTRONG: We could not elect an honorary member here for a county society.

DR. SARLES: No, the county is the sole judge of that.

SECRETARY: I have no copy of the county constitution and by-laws, but I think that it does provide for honorary membership.

DR. J. M. DODD, Ashland: I think that is true. that there is such a provision.

SECRETARY: But the House of Delegates has no such provision in its constitution.

Dr. Wilkinson: I recall the election of Dr. Philler, who was made an honorary member of the Waukesha County Medical Society, and it is simply in a larger way giving him recognition by the State soieety in electing him to honorary membership, and as I can see, there is no objection and no need to amend the constitution. I never heard of an association that could not elect honorary members.

Dr. S. S. Hall, Ripon: I move that the Secretary be instructed to put on the roll of honorary members of this society, all who have been elected by the Society as honorary members, and all who have been elected by the county societies as honorary members, and that a roll be published with our roll of membership every year of such members as honorary members, all who have been elected by the state society as honorary members, as guests, and all who have been elected by the county societies as honorary members in their counties. Let us recognize the election of a member of a county society to honorary membership, as an election to honorary membership in this society, the county society being an auxiliary society to the state society. I think it is perfectly plain that there is nothing in the constitution to forbid it, as it is established by precedent, and I would urge the passage of the motion.

Seconded by the Secretary.

Dr. F. T. Nye, Beloit: There is a question of a per capita tax, and should we give him the Journal.

Dr. Hall: Let us give him the Journal.

Secretary: I would move that the Journal be furnished to honorary members as well as to members who pay.

Dr. Sarles: I move to amend Dr. Hall's motion by moving that this matter be referred to the councilors and then referred back to the House before you close. You must prescribe the rights of the honorary member. Otherwise you will get mixed up.

I move that the matter be referred to the council and then we can take the advice of Dr. Craig of the American Medical Association as to honorary membership, and what constitutes honorary membership as he defines it, and I think the council will have to formulate some plan in the matter.

Dr. Armstrong: Will that require an amendment to the constitution?

Dr. Sarles: No.

President: Will you accept the amendment?

Dr. Hall: The House of Delegates is perfectly competent to

refer the motion to the council for their consideration, and have them report back.

PRESIDENT: But your motion was that these men be considered honorary members, and there is a second to it.

DR. SARLES: This matter carries a financial question with it, and must go to the council.

Dr. Sarles' motion seconded and unanimously carried.

PRESIDENT: That refers the whole matter to the council to report back to the House of Delegates.

DR. SARLES: And then the House can act after it is referred back?

SECRETARY: I move that when we adjourn we adjourn to meet tomorrow morning at 10:30. There will be a meeting of the council at 10 o'clock probably in this room.

There is a short communication which I meant to present. It is supplementary to the Secretary's report.

It is as follows:

125 W. 58th Street, New York, N. Y.

March 13th, 1911.

DEAR DOCTOR: At a meeting of the House of Delegates of the American Medical Association held in St. Louis, Wednesday, June 8th, 1910, the following resolution was presented by Dr. Hubert Work of Colorado:

*Whereas*, The plan of organization of the profession carried to its logical conclusion means that every member of a county society should be ipso facto a member of the American Medical Association, just as every member of a county society is ipso facto a member of a state society, and as it is the ultimate end of the plan that the American Medical Association should be coextensive with the organized profession throughout the land, and as nearly, if not quite, every state already has adopted the plan so far as making every member of a county society a member of a state society, therefore be it

*Resolved*, That the President appoint a committee to draw up details for extending the plan to the American Medical Association, and to present this plan to the various state societies for their consideration during the coming year, and to make a report at the next annual meeting of the House.

Dr. Alexander Lambert of New York moved as an amendment, that the resolution be referred to the Board of Trustees because it means a separation of THE JOURNAL from the membership in a manner which involves the finances of the Association.

The amendment was seconded, accepted, and the original motion as amended was carried.

The Trustees have given this matter full consideration, and at a meeting held in Chicago on Feb. 3rd, 1911, the following resolution was passed:

*Resolved*, That the Board of Trustees refer to the various state societies the question of the desirability of extending the plan of organization as represented in the foregoing resolution, and request that the various state societies take action on this matter and report to the Board.

In accordance with this last resolution I beg herewith to transmit the matter to your Society for consideration, and request that your report be sent to the Board of Trustees, American Medical Association, 535 Dearborn Ave., Chicago, Ill.

Very truly yours,
WISNER R. TOWNSEND, *Secretary.*

DR. CHAS S. SHELDON, *Secretary,*
State Medical Society of Wisconsin,
Madison, Wis.

DR. WILKINSON: I would like to have the first resolution read.

SECRETARY: It does not appear to me quite plain how we can be made any more members of the American Medical Society than we are already. Perhaps Dr. Sarles can tell us.

DR. SARLES: I move that this matter be referred to the council, and that the council report it back.

Motion seconded.

DR. SARLES: This matter was forced upon us for two reasons. This does not contemplate any increased membership dues comparatively speaking. We were forced by the postal department to separate our membership from our subscription. We will be by January next printing four distinct publications. The Archives of Surgery, The Archives of Internal Medicine, American Journal of Diseases of Children and the Journal of the American Medical Association. We found it cost us in the neighborhood of $4 to furnish the original to each member per annum. Now, of course, the other reason was the legal reason as to whether a body of state members, delegated from each county society to meet here and elect delegates to the American Association House of Delegates, was a legal procedure, as non-members of the American Medical Association vote for delegates to the American Medical Association. This question was raised by Dr. Lydston of Chicago, and we have been shown to be at fault, legally, in sending delegates elected, by people who should not vote on the question.

Now, if we can make the American Association our ultimate end, without additional cost to our county members, they simply then become members by virtue of their membership in the county society.

SECRETARY: What is the method?

DR. SARLES: When you join the county society you pay all the dues. That would govern. The question is whether any dues should be raised at all, or whether 25c or a penny or something should be raised. Then you become subscribers; then you subscribe for any

journal or number of Journals you want, that are published by the American Medical Association.

SECRETARY: But you can anyway, can't you, whether you are a member or not?

DR. SARLES: No. If you are a member now you must take the Journal of the A. M. A. anyway and of course you can subscribe for the others if you like, but in a firm of two or more physicians this makes a hardship for it requires duplicates and even 3 or 4 numbers taken when one copy would be sufficient.

SECRETARY: You do not mean members of county societies simply?

DR. SARLES: No, they are non-members of the American Medical Association. Three-fifths only of the journals that are taken are taken by members, the balance are taken on subscription independent of membership. It shows that the Journal is popular, and that the physicians want to have it independent of membership.

Now, this is the question that we ask the state societies: Would they be willing as a body to allow their membership in the county societies to record them as members of the National body, and then that the National Association should give them what they want in the way of a Journal.

PRESIDENT: Do you mean membership in the county or state society?

DR. SARLES: The county society constitutes membership in the state society.

DR. NYE: What constitutes your membership in the National society?

DR. SARLES: You file your application and show your membership in your county and state society and get your Journal at the same rate that you would get it if you were not a member. You pay nothing for your membership in the national body today.

Q. At the present time unless a member of the county society subscribed for the Journal he is not a member of the national body, is he?

A. He can subscribe for the Journal and not be a member, or he can subscribe and declare his willingness to be a member; also that he is a member of his county or state society and thus become a member?

Q. The object of this resolution is to make all members of the county societies members of the national society, is it?

A. Yes, and to subscribe or not as they want; thus we legalize ourselves in the election of delegates to the national body, and thus get a chance to distribute the various journals in accordance with men's wishes. An office with three men can take three separate journals. We propose to put the journals in at as near cost as possible. The journal cost us $4.05 per copy last year. We have been cutting down on the quality of paper a little. It means that unless we can send out the American Journal with a degree of advertising necessary for doctors' patronage, we will lose about $125,000 annually, which would make it cost a whole lot more to furnish you the same journal. In these other journals no advertising is to be carried, but in the American Journal we want to retain the right to insert advertisements.

SECRETARY: Then as I understand, suppose the council takes favorable action, all that would be necessary would be for every member of every county society to send to the American Medical Association office an application for membership.

DR. REDELINGS: How will it affect your advertising? It will cut down the circulation of the American Medical Journal, will it not?

A. Not materially. If we leave all advertising out of every journal we can do as we have a mind to. We can leave it just as it is; but we feel that a journal like the American Medical Journal ought to have a good grade of advertising for our own information with regard to the selling of practices and buying of practices, and a thousand and one things that come under the domain of the advertising department. We propose to have it in one journal and the others just have reading matter in. That is the idea in the office, to divide this work.

G. WINDESHEIM, Kenosha: I should like to ask Dr. Sarles if this change would involve any increase in the membership fee?

DR. SARLES: The intention was not to make any increase. We figured if we could make our subscription to the journal $5, and other rates in proportion, it would not increase the expense of membership. Your subscription list will be taken from your membership list, and we can prove it in that way. Anybody that puts up $5 and says he is a member of the county society, will receive the Journal.

DR. WINDESHEIM: Membership in our county society includes membership in the state society, but only insofar as the county society contributes to the funds of the state society so much per capita. Would it mean that the state society would contribute to the American Medical Society so much per capita for their members?

Dr. Sarles: That has not been worked out. The State secretaries will report the bona fide members.

Q. Would the Secretary with this report of the members of the state society have to send in a certain sum per capita?

A. No. The intention is just to send in an official list. The question will arise simply, are you members of the American Medical Association, and then you choose your journals.

Dr. Nye: It is essential that there be one journal at least subscribed for?

A. No, we cannot do that. The minute we do that the postal authorities say your membership is contingent on your subscription, and you will not come under the law.

Q. How about that state journal?

A. That has nothing to do with the other at all.

Q. Aren't they liable to raise objections to that as well?

A. Of course the probabilities are that we will have trouble if we carry the advertising and do not separate our membership from our subscription to the Journal. The proposition is to let our members take the Journal or not as they choose or any of our publications at subscription prices, and the state journals will have to do likewise.

Q. The government has not raised any objection to the state journal as yet?

A. No.

Dr. Armstrong: Should this happen would there be any change in the literature in the American Medical Association Journal, that is, if some of it be taken out for the Children's Journal and some for the Surgical and some for Internal Medicine?

A. No. Four times as much is sent down to them as they can use, but the matter will be about the same as before. That is all worked out by the different publication committees.

President: The motion of Dr. Sarles to refer this resolution to the council is before you.

Unanimously carried and so ordered.

Recess until 10:30 A. M. next day.

## WEDNESDAY, JUNE 7, 1911, 10.45 A. M.

President Caples in chair.

Secretary called roll, quorum present, proceedings of House of yesterday read by the Secretary, and approved.

SECRETARY: The matter of the affiliation of the different county associations, in order to obviate difficulties which have appeared with the postal officials, which was referred to the council, involving affiliation of the different county societies with the American Medical Society, changing in a way the relation which had previously existed, was referred by the council to a committee to report later in the session, and if the House of Delegates will act on it, it will take action at some future meeting, and no action is necessary at the present time.

Motion made that when an adjournment is taken the House meet immediately after the adjournment of the general session at 12 o'clock.

Motion seconded and unanimously carried.

Recess taken until 12 o'clock noon, June 8th.

JUNE 8, 12:45 P. M.

Meeting of House of Delegates.

Roll call showed quorum present. Minutes of last session read and approved.

SECRETARY: I have received the resignation of Dr. Bryant Smith as a member of the State Medical Society of Wisconsin, due to removal from the state.

Also report of Committee of 12 on Nominations, which by an amendment of the by-laws was made reportable at the second meeting of the state society instead of the last.

The committee appointed for this purpose beg leave to make the following report:

H. B. Sears was elected chairman, and the following names are submitted for officers for the ensuing year:

President, Dr. J. M. Dodd, of Ashland.

1st Vice-president, Dr. T. J. Redelings, of Marinette.

2nd Vice-President, Dr. C. A. Armstrong, of Boscobel.

3rd Vice-President, Dr. Hoyt E. Dearholt, of Milwaukee.

Unanimously adopted.

The report of same committee was adopted giving the names of the following physicians as a list from which the governor may choose members of the State Board of Medical Examiners:

S. D. Beebe, L. R. Head, T. J. Redelings, J. M. Dodd, W. A. Fulton, H. W. Abraham, H. A. Jegi, E. B. Brown, Joseph F. Smith, F. G. Connell.

SECRETARY: I have received copy of the following resolution, also letter, which are self-explanatory:

Resolutions presented to the House of Delegates of the American Medical

Association and referred to the Council on Health and Public Instruction, June 9, 1910.

*Whereas*, The necessity daily appears more imperative of protecting innocent American women and children against infection by the social diseases, syphilis and gonorrhea; and

*Whereas*, There is ample evidence of a belief deeply grounded among the laity that sexual indulgence is necessary to the health of the normal man; and

*Whereas*, There exist, in consequence, widely differing and double standards of moral and of physical health for the male and female sexes, that lead directly to the disease and death of many of our women and children;

*Be it Resolved*, That the American Medical Association through its House of Delegates hereby presents for the instruction and protection of the lay public the unqualified declaration that illicit sexual intercourse is not only unnecessary to health, but that its direct consequences in terms of infectious disease constitute a grave menace to the physical integrity of the individual and of the nation.

June 1, 1911.

DEAR DR. SHELDON: The American Federation of Sex Hygiene, comprising the various State and City organizations the country over enlisted for the sane instruction of mothers and fathers, and through them their children, in sex hygiene, presented last June the enclosed resolutions to the House of Delegates for serious consideration. The need of some honest declaration upon this point of physical need or lack of need for illicit sexual license has long been urgently felt by those who are working quietly for sane instruction with a view to the protection of the home. No more powerful aid can be given this movement, which all physicians must approve, than the endorsement by the Council on Health and Public Instruction and by the House of Delegates of the simple frank, and honest statement carried in the words of these resolutions. No possible harm can come from them. Their influence will be positive and far-reaching for incalculable good. If unable for any reason yourself to work actively in this difficult field, will you not by your vote enable us to work for you. American medical men are far behind foreign physicians in the public pronouncements upon this vital question.

Sincerely yours,

ROBERT H. WILLSON, JR., *Secretary*.

Motion was made, seconded and unanimously carried, endorsing resolution.

DR. CUNNINGHAM: It is necessary in order to make an amendment to the constitution to bring such an amendment before the House of Delegates at least 24 hours in advance. I want to bring before the House to be acted on tomorrow an amendment to Article 4, Section 1.

The proposed amendment is to change it as follows:

"This Society shall consist of members, honorary members, delegates, and guests."

That Section 3, Article 4, be changed to read:

"Honorary members: Those members who have been elected to honorary

membership by the various county societies may be enrolled as honorary members of this society upon approval of the council. These honorary members shall enjoy all the rights of membership, and their dues to the state society shall be remitted. Distinguished physicians of other states who have rendered valuable services to this Society may be elected to honorary membership by the House of Delegates. These distinguished physicians shall enjoy the rights of guests at successive meetings of this society.

That Section 3 be left as it is, but be made Section 4.

That Section 4 be left as it is, but to be made Section 5.

SECRETARY: This is read today in accordance with the provisions of the constitution that amendments must be proposed one day in advance of action.

PRESIDENT: It will be acted on tomorrow.

Recess until 8:30 A. M. next day.

## JUNE 9, 1911, 8:30 A. M.

Meeting called to order by the President. Minutes of the last meeting read and approved. Roll call omitted by unanimous consent, but quorum was present.

SECRETARY: I have had given to me a bill to increase salaries and promote the efficiency of the Public Health and Marine Hospital Service; so that salaries of medical men connected with the service shall be as large as those of other officers of the same rank.

The bill is as follows:

### A BILL.

TO PROMOTE THE EFFICIENCY OF THE PUBLIC HEALTH AND MARINE HOSPITAL SERVICE.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That hereafter the salaries of the commissioned medical officers of the Public Health and Marine Hospital Service of the United States shall be at the following rates per annum: Surgeon General, six thousand dollars; Assistant Surgeon General, four thousand dollars; Senior Surgeon, in which grade there shall be ten in number on active duty, three thousand five hundred dollars; Surgeon, three thousand dollars; Passed Assistant Surgeon, two thousand five hundred dollars; Assistant Surgeon, two thousand dollars: and the said officers, excepting the Surgeon General, shall receive an additional compensation of ten per centum of the annual salary as above set forth for each five years' service, but not to exceed in all forty per centum: Provided, That the total salary, including longevity increase, shall not exceed the following rates: Assistant Surgeon General, five thousand dollars; Senior Surgeon, four thousand five hundred dollars; Surgeon, four thousand dollars.

When officers on active duty are not provided quarters they shall receive in lieu of same commutation therefor at the rate of twelve dollars per room per month, as follows: Surgeon General, eight rooms; Assistant Surgeon

General, seven rooms, Senior Surgeon, six rooms; Surgeon, five rooms; Passed Assistant Surgeon, four rooms; Assistant Surgeon, three rooms; and shall receive commutation for necessary fuel and lights for the same at rates to be fixed by the Secretary of the Treasury: Provided, That officers while serving outside the boundaries of the continental United States shall receive an additional ten per centum of their salaries and increase while on such duty.

The allowance for baggage and personal effects to an officer in changing stations shall be fixed by the Secretary of the Treasury, not to exceed in any case seven thousand two hundred pounds.

Vacancies in the grade of senior surgeon shall be filled by promotion, after satisfactory examination, from the grade of surgeon and in the order of seniority of said grade; passed assistant surgeons shall be promoted to the grade of surgeon in the order of seniority at the expiration of twelve years' commissioned service and after satisfactory examination; assistant surgeons shall be promoted to the grade of passed assistant surgeon in order of seniority at the expiration of three years' commissioned service and after satisfactory examination.

SECRETARY: I know nothing of the merits of the Bill, but the salaries, I understand, are made to correspond with officers of equal rank in other departments.

PRESIDENT: I feel that any Bill passed by Congress that increases the salaries of physicians is commendable, and personally I would favor the passage of this bill, and I will be glad to have action taken upon it.

SECRETARY: I move that the House of Delegates endorse this Bill as presented to us, and that the Secretary be instructed to send this to the proper person.

Seconded and unanimously carried.

SECRETARY: We have a communication from Dr. Doherty of Richland county. That finishes up the last county that we did not hear from, with the exception of Door, which we shall have to fix up some way. The Secretary says he will forward the report to us, and then he goes on with a long letter showing the difficulties attending the proper conduct of a county society in a small town in a sparsely settled county. I think we will get a report in time. Dr. Doherty, who paid no attention to my letters during the whole year, was not the secretary until this letter which is addressed to Dr. Cunningham, dated June 5th, was received.

I have received a telegram from Dr. Evans, containing his present wishes for a good meeting. I will answer it saying that we have had the greatest meeting in the history of the State Medical Society of Wisconsin. (Applause.)

DR. CUNNINGHAM: The committee proposes the amendment to the constitution as read yesterday.

Substitute for Article 4, Section 1:

"This Society shall consist of members, honorary members, delegates, and guests."

The substitute for Section 3 of the same article:

"Honorary members. Those members who have been elected to honorary membership by the various component societies may be enrolled as honorary members of this Society upon approval of the council. These honorary members shall enjoy all the rights of membership and their dues to the State Society shall be remitted. Distinguished physicians of other states who have rendered valuable service to this Society may be elected to honorary membership by the House of Delegates. These distinguished physicians shall enjoy the rights of guests at succeeding meetings of this Society.

Section 3 to be made Section 4.

Section 4 to be made Section 5.

Dr. Dodd moved the adoption and Dr. Sheldon seconded the motion.

Dr. Cunningham: I would like to explain first: It was considered that there should be some limitations upon who should be eligible, and our first idea was to incorporate in the section some limitations of who should be eligible to honorary membership, from our local and county societies. Then we thought it was best that the limitations as to who should be eligible be left to the council, and as it reads: Who may be enrolled to honorary membership in this Society upon approval of the council; the council may make rules as to the admission to honorary membership.

Secretary: I would like to know the sense of the House of Delegates in regard to the enumeration of our membership. Shall these honorary members be included as members of the State Medical Society?

Dr. Cunningham: Under the resolution they shall enjoy all the rights of membership, and that would include the right to be counted and to receive the Journal.

Dr. Sears: I do not think that was the spirit of the resolution. You will remember that one doctor who was an honorary member, was made President, Dr. Reynolds. The idea was that they should enjoy all the privileges of membership and that there should be no restriction. They were made honorary members on account of meritorious service, and there should be no restriction at all.

Dr. Cunningham: That is the understanding.

Dr. Sayle: The council has the decision after such men are placed as honorary members by local organizations.

Secretary: Shall the Journal be sent to them?

Dr. Sayle: It rests with the council. Not every honorary mem-

ber of a local organization will necessarily become an honorary member here.

DR. CUNNINGHAM: That is true.

DR. SAYLE: The State Society reserves the right to pass on that.

DR. CUNNINGHAM: That is the idea.

DR. SAYLE: Does that carry this medical defense, or is that separate from the dues.

SECRETARY: That is an entirely separate matter. The ordinary members have the right to pay the $1 a year and be protected, and the honorary members can do the same thing. They will have to pay it if they expect the defense.

DR. WINDESHEIM: As far as I understand it, the medical defense is not a part of the work of the Society. It is a separate institution.

SECRETARY: It is a separate affair entirely.

DR. WINDESHEIM: The question was raised about putting an age limit or service limit with regard to members. The trouble there would have been that every physician of advanced age or who had been a member of this Society for 15 or 20 years, would have thought, perhaps, that he ought to be made an honorary member, and the reason why we thought it was best to leave it to the council was this, that some counties have elected honorary members who could not be elected honorary members of this Society. I know of two or three honorary members in county societies that cannot be members of this Society—not honorary members nor any other kind of members—because they are not eligible. They were simply elected as honorary members of their county Society by virtue of their standing in the community, etc., simply as a matter of courtesy.

SECRETARY: In the interests of harmony or for motives of policy?

DR. WINDESHEIM: And I do not think any county society would present to you a list of those honorary members and have you accept them as honorary members with full privileges and rights of the members of this Society; but by leaving it with the council, if those counties should come up with that list, the council can easily find out whether the man is entitled to honorary membership.

DR. DODD: I would suggest the wording of that resolution like this:

"Shall enjoy all the rights and privileges of membership except Medical Defense."

SECRETARY: They can have medical defense if they pay their dollar. It follows when a man is made an honorary member that he is exempt from dues; but if he expects to enjoy the medical defense, he will be expected to pay for it.

DR. DODD: If it is so understood all right, but if some honorary member wants to take advantage of the medical defense feature some time it might be somewhat embarrassing. That would eliminate it by simply stating all the rights and privileges except medical defense.

DR. HALL: It would not be possible for any one who has not paid his dues to get any use of the medical defense. He must have paid his dues up to date; and I do not think this resolution would cover it or would be regarded by the committee on medical defense or the attorney as so covering it. He would be thrown out on that ground.

DR. SAYLE: I think that is right, because such members as wish to continue practising and are honorary members ought to pay their dues.

DR. GEORGE N. HIDERSHIDE, Arcadia: You state in your resolution that he should enjoy all the rights of membership, etc. We know all about the matter at this meeting, but take it 5 or 10 years hence and it might not be so readily known whether the medical defense fund is included or not, and I think the suggestion of Dr. Dodd is good. So that those who come after us may know just what is done and what is meant.

SECRETARY: The wording of Dr. Dodd's resolution would not cover it.

DR. HIDERSHIDE: Then add the word "unless."

SECRETARY: We propose to give them the same opportunities for medical defense that all other members have; by paying their $1 they get it.

DR. HALL: They would not get it. He must have paid all the dues.

PRESIDENT: The dues are remitted.

DR. HIDERSHIDE: I move to amend by adding if they pay their defense fee.

DR. WINDESHEIM: Again I wish to speak on this subject. If we mention medical defense anywhere in our constitution and by-laws, our medical defense is worth absolutely nothing.

SECRETARY: It is entirely separate.

DR. WINDESHEIM: Your attorneys have told you that. Dr.

Moyer came up from Chicago and told us that the medical defense is absolutely outside of the medical society. It is simply an agreement between the members of the Medical Society to keep that going; and how anybody can enjoy the privileges of medical defense when they do not pay even that $1 toward the medical defense fund, I cannot understand.

Another thing: These honorary members are usually men out of practice, and they would not need any medical defense.

To mention medical defense in our constitution or any amendment thereof, is not a wise thing.

PRESIDENT: Personally I would be willing that the members who are honorary members and considered worthy of honorary membership, should be protected by the medical defense, whether they pay the dollar or not. I do not know how the delegates would feel about that, but if we find later on that it would include medical defense, I think we ought to protect them anyway. They are honorary members and they are men in good standing in the Society, and they ought to have all the protection we can give them.

DR. DODD: I move the adoption of the original motion.

Seconded and unanimously carried.

PRESIDENT: The resolution is adopted and the amendment is carried and adopted.

SECRETARY: The city of Wausau has invited us cordially to hold our next annual meeting at that place. I move that their invitation be accepted, and that we all boost for the 1912 meeting from this time on.

Motion seconded.

DR. DODD: Before this motion is acted on I want to discharge a duty which was imposed upon me by our local medical society. You will remember that last year I invited you to come to Ashland for this year's session, and the invitation was not accepted; and I come again to you with that invitation to come to Ashland for the 1912 session. Most of the people think that Ashland is a long way off, and it is in miles, but when you consider that you get on a train in the evening and get off the next morning in Ashland, the proposition looks different. We have as good railroad facilities as any city in the state. We have 24 trains arriving there and departing from there every day. We are the eastern terminus of the Northern Pacific, the northeastern terminus of the Omaha, the northern terminus of the Wisconsin Central, now the Soo, and the northern terminus of the North Western, trains arriving and departing in the evening and

morning on all roads. We had in mind a trip to the Apostle Islands, and the invitation is presented to you, and I move that the choice of the place of meeting be decided by ballot.

Seconded and carried and so ordered.

DR. HALL: In order to have a complete understanding of the situation, I would like to ask Dr. Wright what the hotel accommodations are at Wausau?

DR. WRIGHT: I think the hotel accommodations are ample. They have the Bellis House capable of taking care of all the guests who would want to go there. Then there are a number of other hotels that are good; and they are an enterprising people; so I am confident that every arrangement can be made that any city of its size or even much larger could make under the circumstances.

DR. R. W. JONES, Wausau: We shall be glad to welcome you to Wausau. We will guarantce that we can provide accommodations for all the delegates and visitors, and that we will have all the train services necessary. The accommodations are good, and we will endeavor to see that you will have a good time. We have a first class meeting place in one large hall on the shore of the lake. It is a stone building, and will be perfectly quiet.

DR. DODD: We have one of the best club houses in the state, capable of accommodating the Society for all its sessions.

DR. JONES: We also have club houses.

DR. WRIGHT: Within two years we have entertained the state meeting of the Knights of Pythias, and they were highly pleased, and last year we entertained the United Commercial Travelers, and they were very enthusiastic, and I think we can take care of the State Medical Society.

DR. JONES: I understand that we had over 1500 at the U. C. T. convention.

DR. SAYLE: In tents?

A ballot was then taken.

PRESIDENT: 16 ballots have been cast of which 11 are for Wausau, 3 for Ashland and 2 blanks.

DR. DODD: I move that Wausau be the unanimous choice of the House of Delegates as the next place of meeting.

Seconded and unanimously carried.

DR. J. F. SMITH (Wausau): On behalf of the House of Delegates I feel we should extent a hearty vote of thanks to the program committee. The policy they have pursued in securing talent from

the State of Wisconsin and bringing in for the orations men that we do not see and hear so frequently, is a sound policy. I move that the House of Delegates extent a rising vote of thanks to the program committee.

SECRETARY: Not to the program committee, but to Dr. Gray, as chairman of that committee. He did all the work.

DR. DODD: I move that Dr. Gray be requested to continue as chairman of the program committee the coming year.

Motion seconded.

Both motions unanimously carried.

DR. WINDESHEIM: Our treasurer now has to keep the account of the medical defense fund as well as of the society; he also has to keep an extra account in regard to our publication; and I therefore move to raise our treasurer's salary to $200 a year.

Motion seconded and unanimously carried.

PRESIDENT: That will be a recommendation referred to the council.

CHAIRMAN: The House of Delegates stands adjourned.

## MEMBERS OF STATE MEDICAL SOCIETY OF WISCONSIN.

Abaly, W. C., Madison.
Abbott, C. N., Fosterville.
Abbott, Le Roy, Ontario.
Abraham, Henry W., Appleton.
Ackerman, William, Milwaukee.
Ackley, S. Breck, Wankesha.
Adams, G. F., Kenosha.
Adams, H. R., Marinette.
Adams, John C., Superior.
Addleman, I. M., Wausau.
Akerly, A. W., Milwaukee.
Albers, Herman H., Allentowu.
Alcorn, D. N., Stevens Poiut.
Alexander, J. H., Belmont.
Alleu, A. L., Middleton.
Alleu, Frank, Staples, Minn.
Allen, J. P., Beloit.
Allen, S. P. Oshkosh.
Allen, W. J., Beloit.
Altman, Maurice, Milwaukee.
Amsel, J., Milwaukee.
Amundson, A. C., Cambrldge.
Amundsou, P. B., Mondovi.
Audersou, C. M., Wild Rose.
Anderson, H. B., Beloit.
Andrae, R. W., Rib Lake.
Andre, Frank E., Kenosha.
Andrew, G. F., Honey Creek.
Andrews, E. P., Lodi.
Andrews, N. P., Abbotsford.
Andrews, N. S., Oshkosh.
Andrus, A. P., Ashland.
Ankenbrandt, A. A., Schleisingerville.
Antoine, F. J., Prairie du Chien.
Aplin, Floyd W., Waukesha.
Armstroug, Chas. A., Boscobel.
Armstrong, C. E., Oconto.
Armstrong, L. G., Boscobel.
Arveson, R. G., Frederic.
Ashum, D. W., Eau Claire.
Atwood, J. B., Oconto.
Aubin, J. N., Peshtigo.
Aus, J. L. N., Deer Park.
Axtell, E. E., Marinette.
Axtell, L. E., Marinette.
Aylward, R. C., Port Edwards.
Baasen, John M., Mt. Calvary.
Babcock, I. G., Cumberland.
Bach, J. A., Milwaukee.
Bachhuber, A. E., Mayville.
Bachhuber, L. M., Mayville.
Bacon, Brooklyn, N. Y.
Bading, G. A., Mllwaukee.
Baer, A. N., Milwaukee.
Baer, C. A., Milwaukee.
Bair, F. M., Baltimore, Md.
Baird, John, Superior.
Baird, J. C., Eau Claire.
Baker, Geo. R., Tomahawk.
Baker, J. C., Hawkins.
Baker, W. F., Birnamwood.
Baldwln, George E., Dartford.
Baldwin, F. H., Rewey.
Baldwin, F. H., Llvingston.
Bancroft, H. V., Blue Mounds.
Banks, W. H., Hudson.
Barber, J. L., Madisou.
Bardeen, C. R., Madison.
Barnes, E. C., Ripon.
Barnes, H. T., Pewaukee.
Barnes, J. Steele, Milwaukee.
Barnett, J. R., Neenah.
Barnett, J. R., Jr., Neenah.
Barnstein, C., Timothy.
Barnstein, J. E., Manitowoc.
Barrett, E. J., Sheboygan.
Barry, Howard, Sun Prairle.
Barth, George P., Milwaukee.
Bartlett, Edlth, Janesvllle.
Bartlett, E. W., Milwaukee.
Bartlett, Mary, Belolt.
Bartram, W. H., Green Bay.
Bass, E. A., Montello.
Bassett, V. H., Savannah, Ga.
Batchelor, Gertrude, Madison.
Batchelor, W. A., Milwaukee.
Bath, D. H., Oshkosh.
Batty, A. J., Portage.
Bauer, K. T., Adell.
Bayer, W. H., Gleason.
Bear, W. G., Monroe.
Beck, A. A., Caloma.
Becker, B. A., Silver Lake.
Becker, Wilhelm, Milwaukee.
Becker, W. F., Milwaukee.
Beckman, Chas. R., La Crosse.
Bedley, H. E., Downing.
Beebe, C. A., Fond du Lac.
Beebe, Carl M., Sparta.
Beebe, C. S., Milwaukee.
Beebe, L. W., Superior.
Beebe, P. A., Glenwood.
Beebe, S. D., Sparta.
Beech, G. D., Baraboo.
Beffel, John M., Milwaukee.
Beier, A. L., Chippewa Falls.
Belitz, Alfred, Cochrane.
Belitz, William, Cochrane.
Bell, A. R., Tomah.
Bell, Samuel, Beloit.
Bellack, Bernhard F., Columbus.
Bellin, J. J., Green Bay.
Bellin, Jos. J., Greeu Bay.
Bellis, G. L., Antigo.
Belting, T. W., Somerset.
Bender, J. L., Yuba.
Beunett, Lewis F., Beloit.
Bennett, L. J., Ft. Atkinson.
Bennett, William C., Oregon.
Benson, Gideon, Richland Center.
Bentley, Frederick D., Portage.
Bergh, C., Whitehall.
Berglund, S., Marinette.
Bernhard, Adelheim, Milwaukee.
Berquist, K. E., Galesville.
Bertrand, J. H., De Forest.
Berwick, T. A., Sankville.
Betcher, W. F., Marathon City.
Betz, J. C., Boscobel.
von Benst, M., New Albany, Ind.
Beutler, William F., Wauwatosa.
Beyer, A. G., Milwaukee.
Bickford, L. C., Milwaukee.
Bill, B. J., Genoa Junction.
Binnewies, F. C., Milton.
Binnie, John, Poynette.
Birbeck, Samuel, Gratiot.
Bird, H. R., Madison.
Bird, Maurice D., Marinette.
Bishop, L. A., Fond du Lac.
Black, Nelson M., Milwaukee.
Blair, J. C., Hazel Green.
Blanchor, W. O., Grand Rapids.
Blank, Henry, Milwaukee.
Blumenthal, R. W., Milwaukee.
Blumer, Edward, Monticello.
Bock, F. J., Lancaster.
Bock, Otto B., Sheboygan.
Bodden, A. M., Milwaukee.
Boerner, R. W., Milwaukee.
Boerustein, Max, Milwaukee.
Bogan, J. M., Mackinac Is., Mich.
Bolton, E. L., Chilton.
Booker, J. S., Ironton.
Boorse, Lorenzo, Milwaukee.
Boothby, Eugene L., Hamuiond.
Borchardt, A. L. C., New London.
Borden, F. R., Plainfield.
Bossard, Clemens, Richfield.
Bossard, M., Spring Green.
Bothwell, Dana F., Pardeevllle.
Boucseln, G. F., Detroit Harbor.

Bowen, H. P., Johnson Creek.
Bowman, Frank F., Madison.
Boyce, Samuel R., Madison.
Boyd, C. D., Kaukauna.
Boyd, G. T., Fond du Lac.
Bradbury, E. L., Neillsville.
Bradfield, J. A. L., La Crosse.
Bradford, E. B., Hudson.
Bradley, H. E., Milwaukee.
Brah, A. J., Milwaukee.
Braun, Otto, Ashland.
Breckenridge, H. E., Racine.
Breed, A. L., Rock Elm.
Brehm, H. J., Racine.
Brehm, Theodore, Racine.
Brett, Ben C., Green Bay.
Briggs, S. J., Sun Prairie.
Broene, A. H., Oshkosh.
Brockway, F., Oshkosh.
Broker, John, Ironton.
Bromley, F. W., Palmyra.
Brooks, E. H., Appleton.
Brooks, F. D., Fox Lake.
Brown, A. D., Mineral Point.
Brown, A. L., Wausau.
Brown, E. B., Beloit.
Brown, F. W. A., Oshkosh.
Brown, G. V. I., Milwaukee.
Brown, H. M., Milwaukee.
Brown, H. S., Cushing.
Brown, John F., Sparta.
Brown, J. M., New London.
Brown, J. S., Burnett Junction.
Brown, R. C., Milwaukee.
Brownell, W. F., Three Lakes.
Brunckhorst, F. O., Hortonville.
Bryant, J. R., Wausau.
Bryant, W. V., Madison.
Buchan, Samuel C., Racine.
Buchanan, R. C., Green Bay.
Bucklaud, R. H., Dartford.
Buckley, T. J., Fayette.
Buckmaster, S. B., Janesville.
Buehler, J. W., Prairie du Sac.
Bugbee, George R., Wausau.
Buntiug, C. H., Madison.
Burdick, A. F., Beloit.
Burdick, J., Milton.
Burdon, R. M., Green Bay.
Burger, H. E., Beloit.
Burnes, H. J., Bruce.
Burns, J. W., Oakfield.
Butler, E. F., Mosinee.
Butler, F. E., Menomonie.
Butzke, E. J., Jackson.
Caffrey, A. J., Milwaukee.
Cohoon, Roger, Baraboo.
Cain, C. L., Elmwood.
Cairns, R. U., River Falls.
Caldwell, H. C., Ridgeland.
Caldwell, M., Waukesha.
Calkins, H. J., Shawano.
Callahan, J. J., La Crosse.
Calvey, P. J., Fond du Lac.
Campbell, A. D., Richland Center.
Campbell, A. F. L., Dunbar.
Campbell, B. L., Milwaukee.
Campbell, D. J. L., Dunbar.
Campbell, L. A., Clear Lake.
Campbell, W. B., Menomonie Falls.
Canavan, J. V., Appleton.
Canright, O. S., East Troy.
Cantwell, W. H., Shawano.
Caples, Byron M., Waukesha.
Carey, C. E., Welcome.
Carey, G. H., Merrill.
Cargill, Nellie W., Milwaukee.
Carhart, G. A., Milwaukee.
Carnahan, George M., Bruce.
Carter, R. M., Green Bay.
Casey, Merle, Almond.
Cassidy, W. W., Durand.
Caswell, H. O., Ft. Atkinson.
Caughey, C. R., Kenosha.
Cavanaugh, T. E., Milwaukee.
Chambers, H. P., Florence.
Chandler, Ada B., Pardeeville.
Chandler, Joseph, Pardeeville.
Chaney, Eugene, Wauwatosa.
Chapman, F. M., Milwaukee.
Charron, T. A., Rice Lake.
Chase, R. R., Eau Claire.
Chilson, Benjamin, Beloit.
Chipman, H. A., Stoughton.
Chloupek, C. J., Green Bay.
Chorlog, J. K., Madison.
Christensen, C., La Crosse.
Christensen, E. L., Two Rivers.
Christensen, F. C., Racine.
Christensen, J. W., Kendalls.
Christian, E. F., La Crosse.
Christianson, O. A., Hawkins.
Christofferson, A. M., Colby.
Christofferson, H. H., Colby.
Christofferson, P. J., Waupaca.
Chrysler, Oscar, Milwaukee.
Churchill, B. P., Milwaukee.
Clark, F. T., Waupun.
Clark, W. T., Ft. Atkinson.
Clarke, Burton, Oshkosh.
Clason, Jesse A., Neosha.
Clawson, H. E., Red Granite.
Cleary, B. L., Edgerton.
Cleary, J. H., Kenosha.
Coffey, C. J., Milwaukee.
Cohn, Arthur H., Milwaukee.
Cole, C. E., Superior.
Cole, E. J., Rockton, Ill.
Coleman, H. M., Barron.
Collins, D. B., Madison.
Collins, F. E., Wausau.
Collins, W. P., Racine.
Combacker, Henry, Osceola.
Combs, C. J., Oshkosh.
Comer, W. C., Cecil.
Comfort, A. I., Milwaukee.
Conkey, Charles D., Superior.
Conklin, G. H., Superior.
Conley, John M., Oshkosh.
Connell, D. R., Beloit.
Connell, F. G., Oshkosh.
Connell, James P., Fond du Lac.
Connor, H. J., Superior.
Conway, H. P., Spring Valley.
Cook, E. H., Watertown.
Cook, F. S., Eau Claire.
Cook, J. M., Darlington.
Coon, G. E., Milton Junction.
Coon, J. W., Wales.
Cooney, E. W., Appleton.
Cooper, Clifton A., Montfort.
Copeland, Ernest, Milwaukee.
Corbett, John, Lowell.
Corbett, J. F., Wauwatosa.
Corbett, M. E., Oshkosh.
Corlett, M. S., Waterford.
Corr, Anna S. B., Juneau.
Corr, John T., Kenosha.
Costello, A. E., Spooner.
Cottington, Robert, Bloomer.
Cotnoir, A. B., Marinette.
Cotton, H. C., Prescott.
Coughey, C. R., Kenosha.
Coumbe, Warren A., Blue River.
Cowan, W. F., Stevens Point.
Cox, James, Jefferson.
Crane, M. C., Osseo.
Cremer, C. H., Cashton.
Cressey, L. E., South Wayne.
Critman, E. S., Almena.
Crockett, W. W., Beloit.
Crommett, H. B., Amery.
Cron, Charles O., Camp Douglass.
Cronyn, W. J., Milwaukee.
Crosby, E. P., Arnott.
Cunningham, J. N., Stanley.

Cunningham, M. A., Janesville.
Cunningham, R. B., Cadott.
Cunningham, Wilson, Platteville.
Curless, Grant C., Walworth.
Curreus, J. R., Two Rivers.
Curtin, J. J., Wanbeno.
Cutler, John C., Mt. Horeb.
Cutler, John D., Tomahawk.
Cutler, J. S., Wauwatosa.
Dahl, L. A., Menomonie.
Daley, F. P., Reedsburg.
Daniels, Alfred, Rhinelander.
Daniels, Lewis, Milwaukee.
Darby, G. S., Brodhead.
Darby, Henry C., Wilmot.
Darling, Earl, Milwaukee.
Darling, F. E., Milwaukee.
Darling, W. H., Hudson.
Daugherty, C. F., Richland Center.
Davies, Richard E., Waukesha.
Dawley, George T., New London.
Dean, J. F., Madison.
Dearholt, H. E., Milwaukee.
De Besche, Johan, Milwaukee.
Decker, C. O., Crandon.
DeCock, I. L., Leeman.
Deicker, H. F., Plymouth.
DeLane, Viola Freuch, Neillsville.
Delaney, H. O., Beloit.
De Mers, J. J., Cassville.
De Neven, Arthur, Tisch Mills.
Denhan, J. F., Downsville.
Dennis, J. F., Waterloo.
Derge, H. F., Eau Claire.
Devine, C. B., Marshall.
Devine, G. C., Mason.
De Wane, Jos., Boyceville.
Dewey, Richard, Wauwatosa.
Dewire, Milton, Sharon.
Dickens, W. C., Wausau.
Dickinson, G. H., Milwaukee.
Dill, George M., Prescott.
Dillmann, A. E., Steuben.
Dilse, Charles E., Milton.
Dobson, J. Helen, Madison.
Dodd, John M., Ashland.
Doege, Carl W., Marshfield.
Doern, R. E., Stockbridge.
Doern, W. G., Milwaukee.
Doerr, August, Milwaukee.
Doherty, F. P., Appleton.
Dollard, E. C., Neenah.
Donald, W. J., Tunnel City.
Donaldson, F. E., Kaukauna.
Donaldson, George F., Shiocton.
Donnell, J. E., Cuba City.
Donnelly, F. J., Monches.
Donohue, E. J., Antigo.
Donohue, M. J., Antigo.
Donovan, Jerry, Forestville.
Donovan, J. P., Madison.
Doolittle, J. C., Lancaster.
Doolittle, S. Wade, Lancaster.
Dougherty, A. A., Boaz.
Dougherty, A. A., Richland Center.
Dougherty, J. S., Lena.
Doyle, Jos. H., Little Chute.
Drake, Frank I., Madison.
Drew, R. J., Kingston.
Drexel, A., Milwaukee.
Driessel, A., St. Cloud.
Driessel, H., Kewaskum.
Driessel, S. J., Barton.
Dries, Jos., Milwaukee.
Dumley, J. H., Laona.
Dunn, E. A. A., Platteville.
Durr, William, Milwaukee.
Dusenberry, G. F., Amherst.
Dwight, C. G., Madison.
Eagan, J. B., Dell Rapids, S. D.
Eames, H. F., Egg Harbor.
Eastman, J. Russell, Kenosha.
Eaton, Howard, Shopiere.
Echols, C. M., Milwaukee.
Echternacht, A. C., White Creek.
Eck, G. E., Lake Mills.
Edwards, A., Reedsburg.
Edwards, John B., Milwaukee.
Edwards, W. A., La Crosse.
Edwards, Wm. M., Milwaukee.
Egan, Gregory, La Crosse.
Egdahl, A., Menomonie.
Egeland, Gustav, Ephraim.
Egloff, L. W., Elkhart Lake.
Ehlert, E. H., Hartford.
Ehmer, J. W., Lomira.
Eichelberg, F. A., Reeseville.
Eisen, Paul, Milwaukee.
Elfers, Joseph C., Sheboygan.
Ellenson, Eugene, Chippewa Falls.
Elliot J. T., Rhinelander.
Elliot, Sara, Waukesha.
Elliott, E. S., Fox Lake.
Ellis, W. H., Barron.
Elmergreen, Ralph, Milwaukee.
Elsom, J. C., Madison.
English, J. E., Baraboo.
Engsberg, William A., Lake Mills.
Eunis, Shullsburg.
Epley, O. H., New Richmond.
Erdman, Chas. H., Stanley.
Erlanger, Jos., Madison.
Ernst G. R., Milwaukee.
Evans, Curtis A., Milwaukee.
Evans, Edward, South Milwaukee.
Evans, Edward E., La Crosse.
Evans, J. M., Evansville.
Evans, J. S., Madison.
Evans, N. C., Mt. Horeb.
Evans, O., Bangor.
Evans, T. W., Madison.
Everett, E., Madison.
Evert, F. V., Retreat.
Ewing, M. L., Evansville.
Eyster, J. A. E., Madison.
Faber, Chas. A., Milwaukee.
Fairfield, W. E., Green Bay.
Fales, L. H., Stevensville, Mont.
Falge, Louis, Manitowoc.
Farnham, C. R., Milwaukee.
Farnsworth, A. L., Baraboo.
Farnsworth, F. B., Janesville.
Farr, J. F., Eau Claire.
Farr, William M., Kenosha.
Farrell, A. M., Two Rivers.
Faulds, Robert C., Abrams.
Fay, E. C., Whitewater.
Fazen, L. E., Racine.
Fechter, F. J., Elkhart Lake.
Federman, E. H., Montello.
Federspiel, M. N., Milwaukee.
Fehr, Henry, Burlington.
Feld, Carl R., Watertown.
Fellman, George H., Milwaukee.
Fenelon, Charles D., Phillips.
Fennies, Beata, Sparta.
Fetter, Edward, Plymouth.
Fickes, H. C., Owen.
Fidler, C. A., Milwaukee.
Fiebiger, G. J., Waterloo.
Field, F. T., Elroy.
Fifield, G. W., Janesville.
Finney, W. H., Clintonville.
Fish, Edmund, Milwaukee.
Fish, E. C., Mosinee.
Fisher, B. B., Wild Rose.
Fitzgerald, J. J., Eagle.
Fitzgibbon, Thomas, Milwaukee.
Fitzgibbon, William, Milwaukee.
Flatley, M. A., Antigo.
Flattley T. J., Antigo.
Fleek, J. L., Brodhead.
Fletcher, E. A., Milwaukee.
Fletcher, F. E., Ashland.
Fletcher William T., Salem.
Flynn, R. E., La Crosse.

Foat, John S., Ripon.
Foerster, Otto H., Milwaukee.
Foley, F. R., Neshkoro.
Folsom, W. H., Markesan.
Force, O. O., Pardeville.
Ford, A. M., Roberts.
Ford, W. B., Norwalk.
Forkin, G. E., Menasha.
Fosse, Benjamin, Woodford.
Foster, A. M., Kaukauna.
Foster, Fred L., Fond du Lac.
Fowle, F. F., Wauwatosa.
Fowler, J. H., Lancaster.
Fox, George W., Milwaukee.
Fox, P. A., Beloit.
Fox, Phillip, Madison.
Fox, Philip R., Madison.
Fox, W. E., Milwaukee.
Franee, J. J., Milwaukee.
Francis, John H., Bloomer.
Frank, J. H., Neillsville.
Frank, J. H., Milwaukee.
Frank, L. F., Milwaukee.
Frankel, A. H., Milwaukee.
Franzel, J. E., Howards Grove.
Frawley, Ray M., Wausau.
Freeman, Daniel, Colby.
French, S. W., Milwaukee.
Frey, G. R., Milwaukee.
Friedricks, R. O., Milwaukee.
Frieud, L. J., Wausau.
Froelich, J. H., Princeton.
Froggatt W. E. L., Cross Plains.
Frost, Carrie, Chippewa Falls.
Fucile, E. J., Williams Bay.
Fuller, C. O., Stratford.
Fuller, M. H., Angelica.
Fulton, H. A., Eau Claire.
Fulton, William A., Burlington.
Furstman, J. M., La Crosse.
Gaenslen, Fred J., Milwaukee.
Garlock, F. R., Racine.
Gasser, Herman, Platteville.
Gates, A. J., Tigerton.
Gates, Eugene, Two Rivers.
Gault, John A., Lancaster.
Gauut, P. L., Oconto.
Gauvreau, E. T., Superior.
Gavin, Stephen A., Fond du Lac.
Gendron, A. E., River Falls.
Genter, A. E., Sheboygan.
Gephart, C. H., Kenosha.
Gerend, Alphonse, Cato.
Germano, G. A., Kenosha.
Gibbs, G. L., Marshall.
Gibson, J. H., Green Bay.
Gieseu, C. W., Superior.
Gifford, H. B., Huda.
Gilberson, P. P., Black Earth.
Gilbert, H. A., Madison.
Gill, J. F., Madison.
Gillen, F. C., Milwaukee.
Gilles, A. S., Milwaukee.
Gilluly, Thomas, Union Center.
Glasier, Mina B., Bloomington.
Gleason, C. M., Manitowoc.
Gnagi, W. B., Monroe.
Gobar, G. G., Muscoda.
Goddard, J. B., Eau Claire.
Godfrey, Joseph, Lancaster.
Goggins, J. W., Royalton.
Goggins, R. J., Oconto Falls.
Golley, F. B., Milwaukee.
Gommer, Jacob, Gillette.
Goodfellow, J. R., Superior.
Goodrich, G. M., Clintonville.
Goodwin, M. P., Clear Lake.
Gordon, J. B., Shawano.
Gorst, Charles, Mendota
Gosin, D. F., Green Bay.
Gotham, L. E., Sawyer.
Gramling, H. J., Milwaukee.
Gramling, Jos. J., Hales Corners.
Grannis, E. H., Menomonie.
Gratiot, C. C., Shullsburg.
Gratiot, W. M., Mineral Point.
Graves, L. S., Wilton.
Gray, A. W., Milwaukee.
Gray, N. A., Milwaukee.
Green, W. A., Wausau.
Greenberg, Harry, Milwaukee.
Greengo, C. G., Chilton.
Gregory, A. T., Elroy.
Gregory, W. W., Stevens Point.
Greiner, H. A., Fremont.
Grinde, G. A., Cumberland.
Griswold, C. M., Princeton.
Griswold, Frank, Viola
Grosskopf, E. C., Milwaukee.
Grotjan, W. F., Milwaukee.
Ground, William E., Superior.
Gudden, B. C., Oshkosh.
Gunderson, A., La Crosse.
Gunther, Emil, Sheboygan.
Gunther, W. H., Sheboygan.
Gutsch, Otto J., Sheboygan.
Guttman, P., Kellnersville.
Gyge, John, Big Falls.
Habhegger, C. J., Watertown.
Hackett, James, Milwaukee.
Haddy, G. H., Park Falls.
Hadley, D. A., Oconomowoc.
Hagen, Martin, Soldiers Grove.
Haggerty, E. E., Excelsior.
Hahn, A. F., Eau Claire.
Haigh, E. S., Madison.
Hall, C. H., Madison.
Hall, Sidney S., Ripon.
Halloek, W. E., Juneau.
Hambley, T. J., Hurley.
Hamilton, D. B., Ridgeway.
Hammond, F. W., Wyocena.
Hanbrick, Herbert, Van Dyne.
Hanneman, E. A. F., Boscobel.
Hannum, Henry, Bayfield.
Hansberry, J. S., Wonewoc.
Hansberry, R. S., Hillsboro.
Hansen, C. A., Denver, Colo.
Hansen, J., Glenbeulah.
Hansen, O. L., Chicago, Ill.
Harbert, Helen, Kenosha.
Hardy, C. F., Milwaukee.
Hargarten, L. J., Milwaukee.
Harlow, G. A., Milwaukee.
Harper, C. A., Madison.
Harriman, L. L., Boyceville.
Harrington, D. W., Milwaukee.
Harrington, T. L., Milwaukee.
Harrison, David, Mason.
Harter, Alex. F., Marathon.
Hartford, W. P., Cassville.
Harvie, W. D., Oshkosh.
Haskell, M. W., Richland Center.
Hastings, J. F., Kenosha.
Hastings T. R., Limeridge.
Hatch, W. E., Superior.
Haushalter, H. P., Milwaukee.
Hausmann, N. E., Kewaskum.
Haven, S. W., Racine.
Hawkins, T. R., Cameron.
Hay, Thomas H., Stevens Point.
Hayden, A., Shullsburg.
Hayes, Chas. A., Chippewa Falls.
Hayes, D. J., Milwaukee.
Hayes, E. S., Eau Claire.
Hayman, C. S., Boscobel.
Hayman, L. H., Boscobel.
Hayward, J. C., Marshfield.
Head, L. R., Madison.
Healy, R. G., Careyville.
Hebron, R. A., Cataract.
Heeb, H. J., Milwaukee.
Heidner, Gustav, West Bend.
Helsing, Albert, Menomonie.
Helgeson, E. J., New Glarus.
Heller, A. J., Milwaukee.

Helm, A. C., Beloit.
Helm, Ernest C., Beloit.
Helz, J. W., Fond du Lac.
Henbest, C. M., Appleton.
Henderson, M. L., Milwaukee.
Hendrickson, H., Green Bay.
Hendrickson, J. A., Larsen.
Henika, G. W., Beaver Dam.
Henke, William A., La Crosse.
Heraty, J. E., Bloomington.
Hering, E. R., Shell Lake.
Herner, W. L., Oshkosh.
Herron, A. L., Milwaukee.
Hertzman, C. O., Ashland.
Hess, C. F., Madison.
Hess, J. W., Adell.
Hewitt, M. R., Milwaukee.
Hicks, L. N., Burlington.
Hidershide, Geo. N., Arcadia.
Higgins, E. G., Melrose.
Higgins, S. G., Milwaukee.
Hilger, William F., Milwaukee.
Hill, Warren B., Milwaukee.
Hilliard, H. J., Downing.
Hilton, G. F., Sturgeon Bay.
Hinckley, H. G., Merrill.
Hinman, F. S., Rhinelander.
Hinn, Louis P., Fond du Lac.
Hipke, Gustav A., Milwaukee.
Hipke, William, Marshfield.
Hitz, Henry B., Milwaukee.
Hobart, J. P., Prentice.
Hodges, F. L., Monroe.
Hodgson, A. J., Waukesha.
Hoermann, B. A., Milwaukee.
Hoermann, R. B., Milwaukee.
Hoffman, Elmer, Lone Rock.
Hoffman, J. F., Chebek.
Hoffman, J. G., Hartford.
Hoffman, Norman, Milwaukee.
Hoffman, M. A. T., Campbellsport.
Hoffman, P. A., Campbellsport.
Hoffmier, L. A., Superior.
Hogan, J. M., Oshkosh
Hogue, G. I., Milwaukee.
Holbrook, A. T., Milwaukee.
Holliday, Edward R., Bentonville, Ark.
Holtz, H. M., Beaver Dam.
Holz, A. P., Seymour.
Hopkins, F. G., Valders.
Hopkins, J. W., Melrose, Mass.
Hopkius, M. M., Oconto.
Hopkins, W. B., Cumberland.
Hopkinson, Daniel, Milwaukee.
Hopkinson, L., Milwaukee.
Horswell, U. M., Wausaukee.
Hosmer, M. S., Ashland.
Houck, M. P., La Crosse.
Houck, Oscar, La Crosse.
Hougen, Edward, Pittsville.
Hougen, O. T., Grand Rapids.
Hough, A. G., Morrisonville.
Hovde, A. G., Superior.
Howard, J. J., Columbus.
Howison, N. L., Menomonie.
Hoyer, A. A., Randolph.
Hoyer, G. C., Milwaukee.
Hoyer, Lucia, Milwaukee.
Hoyt, R. W., New Lisbon.
Hubenthal, J. C., Belmont.
Huennekins, J. H., Milwaukee.
Huff, F. C., Sturgeon Bay.
Hughes, T. H., Dodgeville.
Hull, E. S., Milton Junction.
Hummel, W. J., Abelsman.
Hunt, Ed. M., Avoca.
Hunt, F. O., Fall River.
Huntington, M. L., Platteville.
Hurd, H. H., Chippewa Falls.
Hurlbut, F. D., Reedsburg.
Hurlbut, W. H., Elkhorn.
Hutchins, S. E., Trempealeau.
Hyslop, F. R., Whitewater.

Irvine, Wesley, Manawa.
Irwin, H. J., Baraboo.
Iverson, M., Stoughton.
Jackey, F. D., Thorp.
Jackson, E. C., Ashland.
Jackson, F. A., Eldorado.
Jackson, J. A., Madison.
Jackson, J. A., Rudolph.
Jackson, R. H., Madison.
Jacob, B. U., Waukesha.
James, A. W., Muscoda.
Jamieson, George, Lone Rock.
Jefferson, H. A., Clintonville.
Jegi, Henry A., Galesville.
Jenkins, G. W., Kilbourn.
Jenner, A. G., Milwaukee.
Jensen, Anton B., Menasha.
Jermain, Hubert F., Milwaukee.
Jermain, Louis F., Milwaukee.
Jobse, Peter H., Milwaukee.
Jobse, William, Milwaukee.
Johnson, F., North Freedom.
Johnson, F. J., Iron River.
Johnson, F. P., Ontario.
Johnson, H. B., Tomah.
Johnson, H. C., Glen Flora.
Johnson, J. C., Ogdensberg.
Johnson, L. M., Winnebago.
Johnston, G. B., Abbottsford.
Johnston, H. E., Oshkosh.
Johnston, W. M., Dale.
Jones, Asa N., Reedsburg.
Jones, A. W., Randolph.
Jones, David F., Wausau.
Jones, Edward H., Weyauwega.
Jones, F. J., Reedsburg.
Jones, J. R., Randolph.
Jones, R. W., Wausau.
Jones, Susan, Racine.
Jones, Thomas R., Green Bay.
Jones, W. A., Oconomowoc.
Jorgenson, P. P. M., Kenosha.
Judd, W. H., Janesville.
Juergens, L. W., Eureka.
Junck, John A., Sheboygan.
Kahn, Joseph, Milwaukee.
Karnopp, G. L., Mishicott.
Karske, W. C., Milwaukee.
Karsten, A. C., Horicon.
Kastner, A. L., Milwaukee.
Kaumheimer, G. J., Milwaukee.
Kanth, P. M., Schleisingerville.
Kay, H. M., Madison.
Keech, J. S., Racine.
Keenan, George, Madison.
Keeny, B., Hudson.
Keithley, J. A., Palmyra.
Keithley, John W., Beloit.
Keller, S. C., Sauk City.
Kellogg, E. Wells, Milwaukee.
Kelly, C. D., Blair.
Kelly, D. M., Baraboo.
Kelly, F. H., Merrill.
Kelly, W. W., Green Bay.
Kemper, William G., Manitowoc.
Kendall, Allen, Prairie du Sac.
Kennedy, W. R., Milwaukee.
Kermott, E. P., Hudson.
Kerner, C. A., Berlin.
Kerr, A. N., Martell.
Kersten, A. M., De Pere.
Kersten, N. M., De Pere.
Ketterrer, E. A., Montfort.
Kiefer, J. G., Milwaukee.
Kimball, G. F., Kenosha.
King, C. F., Hudson.
Kings, H. F., Mason.
Kings, J. T., Watertown.
Kingsley, J. R., Sheboygan.
Kinne, Edward, Elkhorn.
Kissling, C. L., Milwaukee.
Kitzke, F. W., Tomah.
Kleinboehl, J. W., Milwaukee.

Kleinhans, M. A., Milwaukee.
Kleinschmidt, George, Milwaukee.
Klemm, Louis F., Milwaukee.
Kletzsch, Gustav, Milwaukee.
Kliese, L. A., Milwaukee.
Knapp, Leonard L., New Richmond.
Knauf, F. P., Kiel.
Knauf, George E., Sheboygan.
Knauf, Nicholas, Chilton.
Knowles, W. M., Spooner.
Knutson, Oscar, Dallas.
Koch, A. T., Wausau.
Kortebein, Henry, Milwaukee.
Kradwell, William T., Wauwatosa.
Krahn, A. J., Beaver Dam.
Kramer, W. E., Milwaukee.
Kratzsch, A. W., Milwaukee.
Kraut, E., Beetown.
Kremers, Alex., Milwaukee.
Kreutzer, C. A., Milwaukee.
Kriz, George H., Milwaukee.
Krueger, Bernard, Cudahy.
Krygiar, A. A., Milwaukee.
Kyes, S. M., Weyauwega.
La Beck, F. A., Eau Claire.
Lachner, Frank, Laona.
Lacy, S. W., Footville.
Ladd, G. D., Milwaukee.
Lademann, O. E., Milwaukee.
Ladwig, W. A., Edgar.
Laird, J. J., Black Creek.
Lalor, J. C., Sauk City.
Lambeck, F. J., Milwaukee.
Lang, Jacob, Milwaukee.
Langenfeld, P. F., Theresa.
Langenfelder, F. V., Washburn.
Langland, P., Milwaukee.
Lansdowne, F. B., Kenosha.
Larsen, G. A., Blanchardville.
Larsen, L. A., Colfax.
Lasche, P. G., Ithaca.
Latham, C. O., Darlington.
Lathrop, C. A., Sharon.
Lauder, C. E., Viroqua.
Law, W. G., Glidden.
Lawler, C. F., Hilbert.
Lawler, T. S., Lyndon Station.
Lawlor, G. W., Sussex.
Lawrence, G. H., Galesville.
Layton, O. M., Fairwater.
Lee, J. H., Iola.
Lee, J. W., Superior.
Leeson, E. E., Sharon.
Leeson, F. W., Sharon.
Lehigh, R. W., De Forest.
Lehnkering, C. F., Darlington.
Leich, F. P., Jackson.
Leith, S. S., Junction City.
Leland, A. M., Whitewater.
Lemmell, J. J., Albany.
Lemmer, G. W., Spooner.
Lemon, Charles H., Milwaukee.
Leonard, Chas. W., Fond du Lac.
Lester, William A., Onalaska.
Lettenberger, Joseph, Milwaukee.
Levings, A. H., Milwaukee.
Levitas, I. E., Green Bay.
Lewis, James M., Bloomington.
Lewis, S. M., Milwaukee.
Lewis, W. H., Aniwa.
Lid, T. A., Marinette.
Lincoln, W. S., Dodgeville.
Lindorer, J. D., Stevens Point.
Lindsay, H. E., Whitewater.
Linn, W. A., Oshkosh.
Little, W. D., Maiden Rock.
Lochemes, W. T., Milwaukee.
Loehner, Frank, Laona.
Lockhart, Carl, Mellen.
Lockhart, Jasper W., Omro.
Loevenhart, A. S., Madison.
Loge, Edward S., Milwaukee.
Lohmiller, R. K., Superior.
Longenfeld, C. F., Theresa.
Longley, L. R., Fond du Lac.
Loorbourow, N. A., Monroe.
Loomis, E. E., Janesville.
Loope, T. E., Sr., Eureka.
Loope, T. E., Jr., Iola.
Looze, John J., Grand Rapids.
Lorenz, W. F., Mendota.
Lothrop, C. A., Sharon.
Lotz, Oscar, Milwaukee.
Love, G. L., Waukesha.
Ludden, H. D., Mineral Point.
Lueck, George W., La Crosse.
Luehrs, H. E., Hilbert.
Luhmann, F. S., Manitowoc.
Lumley, W. A., Ellsworth.
Lumsden, William, Clayton.
Lumsford, C. B., Gays Mills.
Lundmark, L. M., Ladysmith.
Lyman, J. V. R., Eau Claire.
Lynch, D. W., Jr., West Bend.
Lynch, H. M., West Bend.
Lyons, J. A., Welcome.
McAllin, A. E., Hancock.
McArthur, D. S., La Crosse.
McBeath, H. F., Milwaukee.
McCabe, Harry, Milwaukee.
McCarthy, G. W., Athens.
McCarthy, T. H., Madison.
McChesney, Willard, Edgerton.
McCloskey, T. J., Beloit.
McClure, G. H., Westboro.
McCollister, G. H., Avoca.
MacCollum, C. L. R., Forrest Junction.
McComb, I. N., Brillion.
McCorkle, S. C., Milwaukee.
McCormick, H. M., New Auburn.
McCracken, J. O., Kenosha.
McCracken, R. W., Union Grove.
McCullough, Martha, Parsons, Kan.
McCutcheon, W. R., Thorp.
McDonald, E. M., Beaver Dam.
McDonald, Ed., Cuba City.
McDonald, H. F., Hollandale.
McDonald, W., Lake Geneva.
McDougall, G. T., Fond du Lac.
McDowell, A. J., Soldiers Grove.
McFarland, W. E., Trempealeau.
McGauley, Frank, Fond du Lac.
McGill, Patrick G., Superior.
McGovern, John, Patosi.
McGovern, John J., Milwaukee.
McGovern, Patrick H., Milwaukee.
McGrath, W. P., Menosha.
McIndoe, T. B., Rhinelander.
Mack, J. A., Madison.
Mackechnie, R. S., Hillsboro.
McGuire, W. H., Janesville.
McKee, F. W., Richland Center.
McKellar, A., Blanchardville.
McKeon, Philip, New Richmond.
McKinnon, Hugh, Ashland.
McKittrick, P., Eau Claire.
McKnight, G. B., Fond du Lac.
MacLachlan, W. G., McFarland.
McLaughlin, J. H., Glen Harbor.
McMahon, J. P., Milwaukee.
McRae, J. D., Chippewa Falls.
Madison, James D., Milwaukee.
Maerklein, B. G., Milwaukee.
Maes, C. G., Kimberly.
Malloy, Thomas E., Random Lake.
Malone, Edward W., Waukesha.
Malone, Francis A., Waterford.
Malone, James F., West Allis.
Malone, Thomas C., Milwaukee.
Malone, William F., Milwaukee.
Marble, I. A., Ashland.
Marchessault, J. A., Ashland.
Marquardt, C. H., La Crosse.
Marquis, A. J., Wausaukee.
Marsden, A. L., Rio.
Marsden, T. H., Fennimore.

Marsh, J. M., Elkhorn.
Marshall, J. F., Appleton.
Martin, F. H., Edgertou.
Martin, George, Baldwin.
Martin, Ira P., Green Bay.
Martin, M. T., Merrimac.
Martins, William A., New Holstein.
Mason, C. H., Superior.
Mason, E. L., Eau Claire.
Mason, George, Milwaukee.
Mason, J. B., Marshfield.
Masterson, J. A., Watertown.
Matheison, John, Eau Claire.
Matheson, A., Neillsville.
Mathews, J. B., Milwaukee.
Matter, F. E., Lake Geneva.
Mauerman, J. F., Monroe.
Maurer, A. A., La Crosse.
Maurer, H. C., Beloit.
May, J. V., Marinette.
Meachem, J. G., Racine.
Meacher, Byrou C., Portage.
Mead, Frank, Madison.
Meanwell, W. H., Madison.
Meany, John E., Manitowoc.
Mears, G. V., Fond du Lac.
Melaas, W. G., Stoughton.
Merrell, W. G., Grand Rapids.
Merritt, W. B.
Mertens, H. G., Bayfield.
Messman, Hugo, Milwaukee.
Meusel, H. H., Oshkosh.
Meyers, J. M., Odanah.
Meyst, Charles, East Troy.
Midelfart, Christian, Eau Claire.
Milbie, H. H., Marshfield.
Miller, C. J., Whitewater.
Miller, D. McL., Oconomowoc.
Miller, E. A., Clintonville.
Miller, H. C., Whitewater.
Miller, Thomas, Oconomowoc.
Miller, Wilmot F., Milwaukee.
Miller, W. J., La Valle.
Miller, W. S., Madison
Millman, J. C., Platteville.
Mills, James, Janesville.
Mills, Norman P., Appleton.
Minahan, John R., Green Bay.
Minahan, Robert E., Green Bay.
Minahan, William E., Fond du Lac.
Minshall, A. P., Viroqua.
Mishoff, Ivan D., Milwaukee.
Mitchell, E. J., Brodhead.
Mock, F. C., Milwaukee.
Moffatt, Henry R., Poysippi.
Monk, R. W., Neillsville.
Monroe, William B., Monroe.
Monsted, J. W., New London.
Montgomery, Alex., Eau Claire.
Montgomery, William, Eau Claire.
Moody, Lewis, Superior.
Moore, E. E., Merrilan.
Moore, G. W., Antigo.
Moore, L. A., Monroe.
Moorehouse, G. W., Sharpsville, Pa.
Moray, R. D., Manawa.
Moreaux, F., Luxembourg.
Morgan, J. J., Durand.
Morgenroth, H. W., Oshkosh.
Mork, Ole, Blair.
Morley, F. E., Viroqua.
Morris, E. K., Merrill.
Morris, G., Sharon.
Morris, R. C., Ft. Atkinson.
Morrison, M., Cashton.
Morrison, W. W., Edgerton.
Morse, A. J., Eden.
Morse, Edwin A., Appleton.
Mottenson, O. N., Waupaca.
Moulding, F. C., Watertown.
Mount, H. A., West Allis.
Moyer, Samuel R., Monroe.
Mulford, E. R., La Crosse.
Mulholland, John F., Kenosha.
Mulvaney, F. M., Marion.
Munkwitz, F. H., Milwaukee.
Munn, W. A., Janesville.
Munger, D. C., Ellsworth.
Munro, Sarah R., Milwaukee.
Munroe, D. M., Kenosha.
Murphy, S. W., Kenosha.
Murphy, W. T., Waukesha.
Murray, G. O., Tomah.
Muth, Carl, Sheboygan.
Myers, A. W., Milwaukee.
Myers, Charles F., Chippewa Falls.
Myers, I. A., Cottage Grove.
Nadeau, A. T., Marinette.
Nahin, H. L., Milwaukee.
Nauth, D. F., Kiel.
Neilson, G. W., Milwaukee.
Neilson, W. H., Milwaukee.
Nelsou, A. L., Racine.
Nelson, C. A., Clear Lake.
Nelson, Norman, Madison.
Nelson, Stella B., Oshkosh.
Nelson, William V., Milwaukee.
Newell, Frank, Burlington.
Newell, G. E., Burlington.
Nichols, F. C., Wausau.
Nichols, Willard T., Milwaukee.
Nicholson, J. D., Balsam Lake.
Niemann, A. C., New Holstein.
Nims, C. H., Oshkosh.
Nixon, A. J. W., Delafield.
Nixon, Henry C. B., Hartlaud.
Nixon, R. T. A., Brookfield.
Noble, Joseph B., Waukesha.
Noer, Julius, Stonghton.
Noer, J. P., Wobeno.
Nolan, W. N., Kaukauna.
Nolte, Lewis G., Milwaukee.
North, Charles F., Beaver Dam.
Notbohm, William R., Dousman.
Nott, Wallace G., Racine.
Nowack, L. W., Watertown.
Nugent, L. M., Wauwatosa.
Nutt, C. R., Plymouth.
Nuzum, Thomas W., Janesville.
Nye, F. T., Beloit.
Nystrum, C. E., Medford.
Oakland, H. G., Milwaukee.
Oberempt, B., Milwaukee.
Obertin, C. A., Union Grove.
O'Brien, H. J., Superior.
O'Brien, H. N., Darien.
O'Brien, J. M., Oregon.
O'Brien, Thomas, St. Nazianz.
O'Connell, D. C., Milwaukee.
O'Connell, J. E., Milwaukee.
O'Connor, W. F., Ladysmith.
O'Donovan, T. W., Milwaukee.
Oettiker, James, Platteville.
Ogden, H. V., Milwaukee.
O'Leary, F. J., East Troy.
O'Leary, T. J., Superior.
Olmsted, A. O., Green Bay.
Oliver, F. J., Green Bay.
Olson, A. K., Ettrick.
Olson, E. A., Osseo.
Omsted, Nils, Stoughton.
Orchard, H. J., Superior.
Orr, E. D., Mt. Hope.
Orton, Susanne, Darlington.
Osborne, O. S., Winnebago.
Osborn, W. S., Winnebago.
Ott, H. A., Reedsville.
Overbaugh, J. H., Hartland.
Oviatt, Charles W., Oshkosh.
Ovitz, J. W., Platteville.
Owens, W. Hortonville.
Oyen, Martin, Ellsworth.
Ozanne, I. E., Neenah.
Ozanne, J. T., Oshkosh.
Packard, C. D., Rhinelander.
Pake, S. G., Superior.

Palm, C. A., Kenosha.
Palmer, J. A., Arcadia.
Palmer, W. H., Janesville.
Panetti, E. J., Milwaukee.
Panetti, P. A., Hustisford.
Parham, G. H., Necedah.
Park, W. H., Glenwood City.
Parke, George, Sylvan.
Parke, W. B., Camp Douglas.
Parker, Albert S., Clinton.
Parker, E. H., Eau Claire.
Parker, W. E., Whitehall.
Parkhill, F. G., Delavan.
Parmley, J. P., Mineral Point.
Partridge, O. F., Mattoon.
Patek, Arthur J., Milwaukee.
Patterson, J. A., Iron River.
Paull, Chester A., Wales.
Payne, A. L., Eau Claire.
Peairs, Ralph R. Milwaukee.
Pearce, W. J., Dodgeville.
Pearson, Ogema.
Pearson, L. M., Tomahawk.
Pease, W. A., Otsego.
Pease, William A., Jr., Rio.
Peck, W. W., Darlington.
Peckett, L. S., Wilson.
Peebles, Mary, Shullsburg.
Peehn, Fred G., Corliss.
Pelton, L. H., Waupaca.
Pember, John F., Janesville.
Pembleton, W. E., Wittenburg.
Perrin, George H., Wauzeka.
Perrin, H. E., Star Prairie.
Perry, Gentz, Amery.
Peter, H. T., Oconomowoc.
Peterson, C. E., Independence.
Peterson, George E., Waukesha.
Peterson, N. A., Soldiers Grove.
Petzki, E. A., Hixton.
Pfeiffer, C. W. Sheboygan Falls.
Pfeifer, F. J., New London.
Pfeiffer, H., Jackson.
Pfeil, R. C., Mattoon.
Pfister, Franz, Milwaukee.
Pflueger, J. H., Holman.
Phaneuf, S. J., Somerset.
Phelps, E. J., Eldron.
Phipps, F. J., Milwaukee.
Pickering, Charles R., Muscoda.
Pinkerton, William T., Freeport, Ill.
Pogue, M. E., Lake Geneva.
Pomainville, Frank, Grand Rapids.
Pomainville, George, Nekoosa.
Pope, F. J., Racine.
Pope, F. W., Racine.
Poppe, Alfred, Arkdale.
Poppe, H. B. B., Wautoma.
Poser, Edward M., Columbus.
Post, C. C., Barron.
Potter, I. Y., New London.
Potter, Luther A., Superior.
Potter, R. P., Marshfield.
Powers, J. W., Burlington.
Powlas, A. J., Oneida.
Pretts, W. W., Platteville.
Prill, H. F., Augusta.
Prince, L. H., Berlin.
Pritchard, F. N., Hackley.
Pritchard, J. F., Manitowoc.
Proctor, Thomas C., Sturgeon Bay.
Proudlock, J. H., Radisson.
Prouty, W. R., Burlington.
Provost, A. J., Oshkosh.
Puchner, E., Wittenburg.
Pugh, George H., Kenosha.
Pullen, A. J., North Fond du Lac.
Puls, A. J., Milwaukee.
Purcell, H. E., Madison.
Purtell, E. J., Milwaukee.
Purtell, Jos. A., Milwaukee.
Quade, F. B., Wausau.
Quam, Jacob, Deerfield.
Quick, E. W., Green Bay.
Quin, J. F., Milwaukee.
Raasoch, H., Nelsonville.
Racek, G. H., Princeton.
Radloff, A. C., Milwaukee.
Ragan, J. F., Gresham.
Ragan, W. J., Gresham.
Randall, G. R., South Milwaukee.
Ransom, C. W., Brooklyn.
Rasmussen, Hans, Milwaukee.
Rath, R. R., Grauton.
Rathbun, John W., Prairie du Chien.
Ravenel, M. P., Madison.
Ravn, B. Iola.
Ravn, Michael, Merrill.
Ray, C. F., Milwaukee.
Raymond, R. G., Brownsville.
Read, Flora A., Fond du Lac.
Reagles, Robert, Arlington.
Rector, A. E., Appleton.
Redelings, Theo. J., Marinette.
Reed, W. W., Jefferson.
Reeve, J. L., Superior.
Reeve, James S., Appleton.
Reeves, S. T., Albany.
Regan, Eugene D. Milwaukee.
Reich, William F., Milwaukee.
Reineck, C., Appleton.
Reincking, H., Milwaukee.
Reincking, J., Hortonville.
Reinert, E. N., Cleveland.
Reinhard, C., Milwaukee.
Reinhard Hans A., Milwaukee.
Reinhardt, J. P., Fountain City.
Reitman, Arthur, Milwaukee.
Reynolds, J. C., Lake Geneva.
Rhode, Henry, Green Bay.
Rice, D. B.
Rice, D. S., Stevens Point.
Rice, E. M., Kewaunee.
Rice, F. A., Delavan.
Rice, R. H., Milwaukee.
Rice, Ray H., Delavan.
Richards, C. A., Rhinelander.
Richmond, James, Loyal.
Riddle, Adeline, Oshkosh.
Riddle, Julia, Oshkosh.
Rideout, M. E., Hortonville.
Ridgeman, A. L., Grand Rapids.
Ridgway, E. T., Tigerton.
Riehl, Fred W., Milwaukee.
Riley, E. A., Park Falls.
Riley, P. E., Elk Mound.
Reinhart, D. B., Merrill.
Rinehart, W. F., Ashland.
Ringo, H. F., Montreal.
Riordan, E. J., Wilton.
Riordan, J. F., Neshkoro.
Ritchie, G. G., Appleton.
Ritenhouse, Walter, Lake Geneva.
Roberts, John, Portage.
Roberts, J. A., Manitowoc.
Robinson, H. A., Kenosha.
Roby, H. S., Milwaukee.
Rock, John N., Milwaukee.
Rockwell, J. W., Hartford.
Rodecker, R. C., Holcombe.
Rodermund, A. M., Athens.
Rodman, A. J., Delavan.
Rogers, A. C., Cascade.
Rogers, A. W., Milwaukee.
Rogers, B. W., Neenah.
Rogers, E. H., Stevens Point.
Rogers Philip F., Milwaukee.
Rohr, J. H., North Milwaukee.
Rolfs, T. H., Milwaukee.
Rood, John F., Darien.
Roos, Adolph, Oshkosh.
Rosenberry, A. B., Wausau.
Rosenberry, B. P., Arcadia.
Rosenheimer, Max, Milwaukee.
Rosholt, J., La Crosse.
Ross, H. R. T., Ladysmith.

Ross, P. M., Granton.
Rostad, K. T., Spring Valley.
Rothert, E. T., Chilton.
Rothman, L., Witteuburg,
Rowles, J. A., La Crosse.
Roy, Emil, Wausau.
Rudolf, S. F., Ellsworth.
Ruckle, William, Grand Rapids.
Rugh, R. E., Lake Geneva.
Ruhland, George C., Milwaukee.
Runck, Roxette, Madison.
Ruschaupt, L. F., Milwaukee.
Russell, F. H., Omro.
Russell, H. C., Milwaukee.
Russell, T. P., Oshkosh.
Ryan, C. E., Appleton.
Ryan, D. J., Algoma.
Sallreiter, W. P., Racine.
Sandborn, M. J., Appleton.
Sanford, A. H., Milwaukee.
Sapper, O. L., Gresham.
Sarazin, F. C., Superior.
Sarles, W. T., Sparta.
Sartell, E. N., Janesville.
Sattre, O. M., Rice Lake.
Saunder, Carl A., Waupaca.
Sauthoff, August, Madison.
Sauthoff, Mary, Mendota.
Savage, G. F., Pt. Washington.
Sayle, R. G., Milwaukee.
Sayles, L. W., Baraboo.
Saylor, Herbert, Merrill.
Schallern, O., Ripon.
Schaper, Herman, Appleton.
Schatz, F. J., Turtle Lake.
Schee, J., Westby.
Scheib, G. F., Fond du Lac.
Scheid, M. M., Rosendale.
Schein, J. E., Oshkosh.
Schell, Ida L., Milwaukee.
Schiller, L., Milwaukee.
Schlag, R. A., Prairie du Sac.
Schlegel, H. J., Wausau.
Schmeling, A. F., Columbus.
Schmidt, Anthony, Beloit.
Schmidt, E. S., Green Bay.
Schmidt, J. A., Brillion.
Schmidt, Philip, Milwaukee.
Schmidt, W. J., Mayville.
Schmit, Felix, Milwaukee.
Schmitt, Gustav, Milwaukee.
Schmitt, Louis, Milwaukee.
Schmitz, W. C., Elkhart Lake.
Schneider, Fred, New London.
Schneider, Joseph, Milwaukee.
Schnetz, L. N., Racine.
Schockley, H., Lamont.
Schoen, C. M., Milwaukee.
Schoen, R. E., Beaver Dam.
Schofield, H. R., Greenwood.
Scholz, G. M., Milwaukee.
Schoofe, J. J., Johnsburg.
Schreiber, E. S., Husher.
Schreiner, J. K., Westby.
Schroeckenstein, R. S., Marion.
Schroeder, H. F., Marinette.
Schulz, F. M., Wauwatosa.
Schung, Max, Bonduel.
Schuster, B. L., Pt. Huron, Mich.
Schwalbach, C. G., Juneau.
Schwarz, S. G., Granton.
Schwenderer, John, Milwaukee.
Scollard, John T., Milwaukee.
Scollard, W. E., Milwaukee.
Scollard, W. J., Milwaukee.
Scott, B. E., Berlin.
Scott, H. E., Argyle.
Scott, J. J., Weston.
Scott, J. R., Appleton.
Seaman Gilbert E., Milwaukee.
Sears, Harry B., Beaver Dam.
Seegers, F. W., Milwaukee.
Seelye, N. L., Lake Geneva.
Seidel, J. G., Warrens.
Seldon, W. B., Thorp.
Senn, C. U., Ripon.
Senn, F. C., Oshkosh.
Senn, George, De Pere.
Severson, Selena, Madison.
Sharp, E. L., Waldo.
Sharp, M. B., Madison.
Shauger, L. S., Ogema.
Shaw, A. O., Ashland.
Shaw, Byron W., Waunakee.
Shearer, K. D., Milwaukee.
Shehan, L. B., Superior.
Sheldon, Charles S., Madison.
Sheldon, Walter H., Madison.
Shepard, W. A., Seymour.
Sherman, Adin, Winnebago.
Shick, I. E., Rhinelander.
Shimek, A. J., Manitowoc.
Shimonek, F., Milwaukee.
Shinnick, Thos. F., Watertown.
Sholdski, Jos., Milwaukee.
Shoykett, F. E., Brandon.
Sickles, W. A., Milwaukee.
Sicker, Arthur W., Franklin.
Sifton, Harry A., Milwaukee.
Silverthorn, F. R., Berlin.
Simonson, J., Tomah.
Sizer, E. M., Fall Creek.
Skwor, Charles S., Milladore.
Slaughter, A. W., Green Bay.
Sleyster, L. R., Waupun.
Smedal, Gregor, La Crosse.
Smiley, R. B., Stevens Point.
Smith, A. D., Gilmanton.
Smith, C. C., Scandinavia.
Smith, C. E. Beloit.
Smith, C. E., Mukwonago.
Smith, C. M., Jr., Evansville.
Smith, E. A., Milwaukee.
Smith, E. J., Neenah.
Smith, Geo. Lewis, Jefferson.
Smith, Jos. F., Wausau.
Smith, P. H., Racine.
Smith, Sidney, South Milwaukee.
Smith, S. M. B., Wausau.
Smith, W. P., Waupun.
Soelberg, Paul A., Medota.
Soles, F. A., Spencer.
Sommers, Julius, Madison.
Sorenson, Soren, Racine.
Southwick, F. A., Stevens Point.
Spalding J. B., Kenosha.
Spawn, M. G., Beloit.
Spears, T. R., Washburn.
Specht, John, Superior.
Spencer, G. F., Evansville.
Spencer, Leonard Wausau.
Sperry, S. P., Milwaukee.
Sperry, Willis P., Phillips.
Spitz, Milton, Milwaukee.
Sporleder, Otto, Logansville.
Stack, G. F., Independence.
Stack, Stephen, Milwaukee.
Staehle, M., Manitowoc.
Stalker, H. J., Kenosha.
Stanley, W. S., Milwaukee.
Stannard, Gilbert H., Sheboygan.
Starnes, Brand, Mauston.
Starr, F. W., Stanley.
Stebbins, E. B., Hurley.
Stebbins, W. W., Verona.
Steele, G. A., De Pere.
Steele, George M., Oshkosh.
Steffen, I. D., Antigo.
Stephenson, W. L., Ladysmith.
Steusser, C., Oconomowe.
Stevens, C. C., De Soto.
Stevens, Frank E., Bristol.
Stevens, J. V., Janesville.
Steves, B. J., Menomonie.
Stiles, F. P., Sparta.
Stiles, V. W., Sparta.

Stiru, F. J., Cudahy.
Stoekman, B. G., Woodville.
Stoddard, C. H., Milwaukee.
Stoelting, C. W., Oeonto.
Stolte, Herman, Milwaukee.
Storey, C. L., Whitehall.
Storley, K. C., Coou Valley.
Stormont, C. J., Viola.
Stoye, J. P., Theresa.
Stratton, F. A., Milwaukee.
Strauss, F. H., Milwaukee.
Strong, W. B., Waukesha.
Stubenvoll, C. E., Shawano.
Studley, F. C., Milwaukee.
Suby, J. I., Stoughton.
Suiter, F. C., La Crosse.
Sullivan, A. G., Madison.
Sure, J. H., Milwaukee.
Surenson, M., Viroqua.
Sutherland, C. H., Janesville.
Sutherland, F. E., Janesville.
Suttle, H. J., Viroqua.
Swarthout, E. C., La Crosse.
Sweatman, R. H., Green Bay.
Sweemer, William, Milwaukee.
Sykes, H. D., Milwaukee.
Tanner, G. F., Turtle Lake.
Tanuer, Herbert B., Kaukauna.
Taruutzer, B. C., Beaver Dam.
Tartar, J. W., Iron River.
Tasehe, Conrad T., Sheboygan.
Taugher, A. J., Milwaukee.
Taugher, J. P., Milwaukee.
Tayler, E. A., Raeine.
Taylor, D. A., Bangor.
Taylor, F. P., Mt. Sterling.
Taylor, L. S., Waupun.
Taylor, M. W., Kilbourn.
Taylor, R. W., Pewaukee.
Tenney, J. S., Alma.
Tenney, J. T., Alma.
Tennies, H. B., Sparta.
Terhorst, H., Milwaukee.
Tesehan, R. C., Milwaukee.
Tesehan, R. F., Milwaukee.
Thadlie, Jos., Cazenovia.
Thayer, C. E., Markesan.
Thayer, F. A., Beloit.
Thieke, G. A., Wausau.
Thienhaus, Karl O., Milwaukee.
Thill, D. P., Milwaukee.
Thomas, W. O., Clinton
Thompson, A. S., Franksville.
Thompson, B. V., Oshkosh.
Thompsou, F. A., Milwaukee.
Thompson, G. E., Kenosha.
Thompson, I. F., Reedsburg.
Thompson, R. E., Milwaukee.
Thorndike, William, Milwaukee.
Thorne, James P., Janesville.
Thrane, A. D. H., Eau Claire.
Tibbits, Newton L., Peshtigo.
Tibbits, Ulysses J., Waukesha.
Tietgen, Arthur, Manitowoe.
Timm, W. W., Milwaukee.
Tisdale, Lewis C., Milwaukee.
Titel, E. A., Green Leaf.
Titus, W. H., Oshkosh.
Todd, Samuel G., Neenah.
Tomkiewicz, Irene G., Milwaukee.
Tompach, Emil, Raeine.
Tormey, Thomas, Madison.
Towne, W. H., Sehloeton.
Townsend, E. H., New Lisbon.
Trankle, H. M., Bloomer.
Travis, A. L., Minneapolis, Minn.
Treadwell, C. L., Kilbourn.
Treat, Charles R., Sharon.
Treglown, L. H., Livingston.
Trevitt, A. W., Wausau.
Trevitt, Margaret, Wausau.
Trimble T. W., Waupaca.
Trowbridge, Charles, Viroqua.
Trowbridge, W. M., Viroqua.
Tuffley, F. S., Livingston.
Tupper, E. E., Eau Claire.
Twohig, David J., Fond du Lac.
Twohig, H. E., Foud du Lac.
Uren, Andrew, Montreal.
Urheim, Olaf, Eau Claire.
Urkart, W. M., West Bend.
Valentiue, L. P., Corliss.
Van Alteua, Louis, Cedar Grove.
Van Altena, L., Jr., Cedar Grove.
Van Delinder, E. M., Beloit.
Vanderlind, L. A., Wautoma.
Van Kirk, F. W., Janesville.
Van Westrienen, A., Kenosha.
Van Zanten, W., Sheboygan.
Vedder, H. A., Edgar.
Vedder, J. B., Marshfield.
Verbeek, S. F., Lodi.
Vereiline, Joseph, Duluth, Minn.
Vogel, C. A., Elroy.
Vogel, Carl C., Elroy.
Voje, J. H., Oconomowoe.
Von Heugel, G. S. A., Waupun.
Von Neupert, C., Sr., Stevens Poiut.
Von Neupert, C., Jr., Stevens Point.
Voorus, C. Wesley, Beaver Dam.
Vorpahl, R. A., Spriugfield.
Vosburgh, W. H., Cooperstowu.
Vosknil, A., Cedar Grove.
Wade, Frank S., New Richmond.
Wadey, Bert J., Belleville.
Wafle, G. C., Janesville.
Wagener, N. Z., Sturgeon Bay.
Wagner, K., Milwaukee.
Wahl, C. M., Spriug Green.
Wahl, H. S., Stratford.
Wahle, H., Marshfield.
Wakefield, P. A., West Salem.
Wakefield, S. R., West Salem.
Walbridge, F. E., Stevens Point.
Walbridge, J. S., Berlin.
Walker, F. W., St. Croix Falls.
Walker, L. G., Pound.
Wall, H. J., Richland Center.
Walsh, Charles Chase, Merrill.
Walsh, F. E., Friendship.
Ward, John Peter, Waukesha.
Warfield, L. M., Wauwatosa.
Washburn, R. G., Milwaukee.
Washburn, Sarah, Hudson.
Washburn, W. H., Milwaukee.
Waters, D., Grand Rapids.
Waters, Hugh, Neekoosa.
Watkins, W. C., Oconto.
Watsou, Fred V., Antigo.
Weaver, L. A., Medford.
Webb, E. P., Beaver Dam.
Webb, W. B., Beaver Dam.
Weber, A. J., Milwaukee.
Webster, B. N., Rice Lake.
Webster, F. E., Amherst.
Wegge, William F., Milwaukee.
Wehle, W. J., West Bend.
Welch, F. B., Janesville.
Welch, F. C., Mukwonago.
Weld, H. J., Campbellsport.
Weld, W. H., Ft. Atkinson.
Wells, A. L., Clear Lake.
Wenstrand, D. E., Milwaukee.
Wenzel, J. V., Ashland.
Werner, C. F., Calumetville.
Werner, H. C., Fond du Lac.
Werner, Nels, Barron.
Werner, R. F., Eau Claire.
Westedt, Otto E., Logansville.
Westgate, F. J. E., Manitowoe.
Westgate, H. J., Rhinelander.
Westphal, H. G., Polar.
Wetzler, S. H., Milwaukee.
Wheeler, C. H. E., Platteville
Wheeler, P. A., Oshkosh.
Wheeler, W. P., Oshkosh.

White, A. G., Milwaukee.
White, A. S., Rice Lake.
White, Moses I., Wauwatosa.
White, William E., Lyons.
Whitehorne, E. E., Vesper.
Whiteside, G. D., Plover.
Whyte, Wm. F., Watertown.
Wichman, G. C., Rib Lake.
Wiesender, A. J., Green Lake.
Wilcox, A. G., Solon Springs.
Wiles, G. B., Sheboygan.
Wiley, Frank S., Fond du Lac.
Wilkinson, John A., Hales Corners.
Wilkinson, M. R., Oconomowoc.
Wilkowski, C. W., Chippewa Falls.
Willard, C. J., Prairie du Chien.
Willard, L. Mortimer, Wausau.
Willett, Thomas, West Allis.
Williams, B. T., Hudson.
Williams, H. H., Sparta.
Williams, Jesse M., Oshkosh.
Williams, R. V., La Crosse.
Williams, Stephen, Chippewa Falls.
Williams, W. E., Cambria.
Williamson, George H., Antigo.
Williamson, J. L., Milwaukee.
Wilmarth, A. W., Chippewa Falls.
Wilson, C. J., Marinette.
Wilson, H. L., Green Bay.
Williams, R. L., Pine River.
Windesheim, G., Kenosha.
Wing, W. S., Oconomowoc.
Winneman, F. A., Merrill.
Winter, A. E., Tomah.
Wintermute, C. E., Kilbourn
Witte, W. C. F., Milwaukee.
Wittman, Adolph, Merrill.
Wolf, H. E., La Crosse.
Wolff, Jacob, Milwaukee.
Wolfrum, O. W., Chicago, Ill.
Wolter, H. A., Green Bay.
Wood, F. C., Westfield.
Woodhead, F. J., Merton.
Woods, E. F., Janesville.
Woodworth, D. W., Ellsworth.
Wray, C. M., Waterloo, Iowa.
Wray, William E., Tomahawk.
Wright, F. R., West Allis.
Wright, J. C., Antigo.
Wright, S. E., Mariuette.
Yanke, A. E., Milwaukee.
Yates, J. L., Milwaukee.
Youmans, L. E., Mukwonago.
Young, A. F., Milwaukee.
Young, G. H., Elkhorn.
Ziegler, E. B., Hayward.
Ziegmund, F. W., Princeton.
Zierath, W. F., Sheboygan.
Zilisch, William E., Wausau.
Zimmerman, A., Kenosha.
Zimmerman, Charles, Milwaukee.
Zimmerman, W. C., Iron Ridge.
Zinns, A. J., Milwaukee.
Zwickey, W. H., Superior.

**Report of a Case of Infectious Optic Neuritis After Roeteln and One After Influenza.** Vossius, A., Giessen. (Beitraege zur Augenheilkunde, Heft 75, p. 252.) A girl, aged 12, was confined to bed for 2 days on account of Roeteln with moderate fever. Since that time she suffered from headaches on the left side and fainting spells. About 2 weeks later she complained of pain and impairment of vision in the left eye, and headache. Choked disc, of from 2.50 to 3.00, was ascertained and a central scotoma for white and colors. She saw only motion of hand. The ocular movements and slight pressure on the closed eye were painful. The right eye was normal. Under mercurial inunctions the affection healed in about 4 weeks, and after 4 months V was almost normal. The optic disc was clearly defined, its temporal half a little paler.

In the 2nd case, a woman aged 34, a left-sided relapsing retrobulbar neuritis with acute intense amblyopia and color blindness occurred after influenza. After 1½ months V was almost 5/5, but the temporal half of the disc was pale. 8 months later V of left eye was again impaired after another attack of influenza.

Finally after a new attack of influenza, 3 months later, a fresh retrobulbar neuritis of the right eye developed, which after 1½ months receded with V. 5/4. 4 weeks later pallor of the temporal half of the right optic disc was ascertained. There was no color-blindness of the right eye but blue was taken for green. At the time of menstruation the patient saw less with the diseased eye than at the intervals.

In this case the retrobulbar neuritis very likely was directly produced by the influenza virus. C. Z.

---

**On 3 Cases of Intoxication by Spirarsyl, Alcohol and Sublimate with Post-Mortems.** Hegner, C. A. (From the eye clinic of Prof. W. Uhthoff in the University of Breslau. Klinische Monatsblätter für Augenheilkunde, 48, II, August 1910, p. 211). A girl, aged 18, was treated for lues with subcutaneous injections of spirarsyl (arsensphenylglycin) in doses of 0.3 at intervals of from 3 to 6 days, 1.10 in all. Soon symptoms of a general severe intoxication developed with headache, vomiting, icterus, edema of the face and exanthema. The lids could with difficulty be opened passively. The pupillary reaction was prompt, central vision not essentially disturbed, visual field free as far as could be determined. Both discs were reddened and ill defined, blood vessels abnormally filled.

4 weeks after the first injection the sensorium was disturbed, pulse accelerated, heart dullness enlarged, systolic murmur, traces of albumen, hyalin and granulated casts in the urine, liver enlarged; death after 6 days.

Microscopic examination of the eye; slight edema of the disc. In the anterior orbital portion of the optic nerve intense accumulation of nuclear lymphocytes in the septa, especially the lamina cribrosa, around the vascular sheathes; vessels and retina unaltered. In this case the anatomical changes of the optic nerve consisted in interstitial neuritis, and widely differed from the findings in intoxications by atoxyl and arsacetine, viz.: degeneration of the optic nerve. Thus it might be assumed that spirarsyl is resolved in the body into entirely different components, which have a different action from that of the products of reduction of atoxyl. C. Z.

# THE WISCONSIN MEDICAL JOURNAL

JANUARY, 1912.

## ORIGINAL ARTICLES.

### LUMBAR PUNCTURE.

BY W. F. LORENZ, M. D.,
STATE HOSPITAL FOR THE INSANE.
MENDOTA, WIS.

This very simple operation has attained a deserving prominence during the last few years. Its scope of usefulness is wide and in the meningeal affections of children, its employment is not only as a diagnostic agent, but a therapeutic measure advocated by the best authorities. L. E. Holt[1] quite recently referred to the aid given by lumbar puncture and compared its usefulness in meningitis to that of throat culture in diphtheria. Fortunately those conditions which indicate a lumbar puncture to verify a diagnosis, are at the same time conditions which would call for the removal of a certain amount of fluid as treatment. In fact the contraindications are so rarely met with and when present do not simulate the conditions which call for its employment, that today a puncture of the spinal dura below the level of the third lumbar vertebra can be done with impunity. The examination of the cerebrospinal fluid should be resorted to when a meningeal condition is suspected or better when it cannot be excluded.

We are ever ready to ask for a blood examination as an aid to diagnosis and look upon the procedure as delightfully simple. A lumbar puncture in many conditions offers both aid and relief and the procedure rivals a blood puncture for simplicity. I will instance the specific conditions in which lumbar puncture is indicated. Failure to employ this procedure in these conditions could be likened to failure to obtain a culture from a suspicious throat or refusal of a Widal test.

## Indications For Lumbar Puncture.

In the diseases of children lumbar puncture attains its most prominent role. Its indications could be briefly summarized as any pathological condition of the brain, cord and the membranous covering whether of inflammatory, traumatic or degenerative nature. The one condition which contraindicates its use is tumor in the posterior cranial fossa.

The most frequent disease which calls for puncture is meningitis. In this sense, meningitis is taken as any inflammatory condition of the meninges irrespective of the causal agency. The type of meningitis must in many instances remain unknown unless a bacteriological examination of the cerebrospinal fluid is made. Unless the type is known specific treatment cannot be employed. Here we have our first indication; the differentiation of the form of meningitis. How reliable this information is can be deduced from the results reported by a number of observers. F. S. Meara[2] found tubercule bacilli present in forty-seven of fifty cases examined. Josephine Heminway[3] reported one hundred and thirty-eight consecutive examinations in which the tubercle bacillus was found in one hundred and seventeen cases upon the first examination. W. P. Lucas[4], C. H. Dunn[5], Sophian[6], and others remark upon the constant presence of this organism in tubercular meningitis. Considering this fact and the statement by Holt[1], that three-fourths of our acute meningeal infections are tubercular in nature, we must conclude that the examination of the fluid in suspected cases is of paramount importance. The meningitis resulting from influenzal, typhoidal or pneumococcal infection, as well as those forms due to the streptococcus or staphylococcus can only be recognized as such if a bacteriological examination of the fluid is made. When the infecting organism is isolated then, and then only, can the specific antitoxin or vaccine be employed.

When we deal with epidemic cerebrospinal meningitis the demand for puncture becomes imperative. Aside from the other findings in the fluid the presence of the meningococcus immediately acquaints us with the type of disease and we have at hand a means of treatment as specific and nearly as effective as antitoxin in diphtheria. The report of J. F. Haden[7] is notable in this respect. He reports twenty-three cases treated with Flexner's anti-meningitis serum, of which nineteen recovered. The experimental work of Flexner's[8] with the inoculation of influenza in monkeys is interesting and confirmatory data in regard to the treatment of meningitis by specific antitoxin.

The examination of the fluid will differentiate an anterior poliomyelitis from early meningitis. Flexner[9] has detected an increase of globulin, using Noguchi's butyric acid test in cases of anterior poliomyelitis before the onset of paralysis. While considering anterior poliomyelitis it is worthy to note the work of Cushing and Crowe[10]. These investigators discovered the excretion of urotropin in the spinal fluid within one hour after ingestion and at the time of their report, April, 1908, they advocated the use of this drug in anterior poliomyelitis. More recently Skoog[11], Clowe [12] and Friedlander[13] have separately written upon the use of this drug in anterior poliomyelitis. They advocate its early and free use. G. S. Laudon[14] advises the use of urotropin in the acute meningeal infections, because of its presence in the cerebrospinal fluid after administration.

Thus far we have considered lumbar puncture from the standpoint of diagnosis. As a therapeutic agent, its scope of usefulness is equally wide. When we recall the pathology of the acute infections of the central nervous system and consider the rigidly enclosed cavity into which exudation occurs, we must admit that the withdrawal of fluid and removal of pressure is beneficial. Considering this removal from the standpoint of our more recent conceptions of infection, we are still more inclined to resort to lumbar puncture in microbial meningitis. The removal of organisms and their toxins must be of benefit. The removal of fluid with little or no opsonic and agglutinative properties and the consequent renewal by fluid rich in protective powers is logical and coincides with our modern theories of cellular reaction to infection.

Aside from the meningeal infections, lumbar puncture has been used by Blake[18] in aural vertigo. He and Putnam[16] recommend its use in this type of vertigo, although they specify that the vertigo must be of labyrinthine origin with an absence of serious middle ear disease. They remove from ten to twenty c. c. of cerebrospinal fluid as a means of treatment. Very recently certain French observers[17] have reported improvement in the chorea of children following lumbar puncture.

Before taking up the degenerative conditions of the brain and cord in which lumbar puncture is of value, I wish to briefly mention the use of puncture in traumatic cases. Concussion, mild or severe, with or without fracture, indicates a lumbar puncture. The extent of injury can thus be estimated. The presence of blood in the fluid will indicate the seriousness of the trauma. Without doubt the many

sequellae of head trauma which are looked upon as functional disturbances will be accounted for by organic changes. In many instances no definite symptoms exist which would point to organic changes, other than the signs obtained by the examination of the cerebrospinal fluid.

Finally we come to the degenerative conditions or more properly the province of mental and nervous diseases. Here a lumbar puncture is of immense aid in differentiating an early paresis from all other psychoses. The reliability of the findings in the fluid has been attested to by a large number of observers. Many of the reports are controlled by post-mortem microscopic diagnosis, so that the dictum laid down by F. W. Mott[18], Rehm[19], Kafka[20], Kirby and Garvin[21], Rosanoff and Wiseman[22] and many others can be accepted without hesitation. This is an increase of nucleated elements in the cerebrospinal fluid accompanied by suspicious mental or physical signs can be regarded as diagnostic of paresis. There is no dissenting opinion that characteristic changes found in the fluid occur early in the course of paresis, in many instances before the physical signs which have formerly been looked upon as diagnostic manifest themselves. This fact is of immense practical value in that we are in a position to recognize a serious condition early in its course. Paresis need never be confused with the purely functional psychoses, since the latter always show an apparently normal fluid. The toxic psychoses and this includes the alcoholic rarely, if ever, show an increase of the cellular constituents in the fluid and consequently the chronic types of alcoholic psychosis, those which were formerly included in the pseudo general paralysis group need no longer cause confusion. The results of spinal fluid examination very definitely differentiate general paralysis from these conditions.

Cerebral syphilis can be differentiated from the parasyphilitic conditions. The cytological examination of the fluid aids, but more important in this differentiation is the negative Wassermann reaction of the cerebrospinal fluid, while the blood serum in the same case will give a positive Wassermann. The parasyphilitic conditions in over seventy per cent of the cases give a positive Wassermann of the spinal fluid and a negative reaction when the blood serum is used. Thus by the use of lumbar puncture, we can diagnose cerebral syphilis and not confuse this condition with general paralysis. This is again of practical importance in that cerebral syphilis is amenable to treatment.

Another use to which lumbar puncture has been placed is the

watching of the effect of treatment. Javorsk[23] and others[24] have reported changes in the composition of the cerebrospinal fluid in both syphilitic and parasyphilitic conditions during treatment. It therefore suggests itself that repeated puncture during the course of treatment of a syphilitic or parasyphilitic condition might offer facts as to the effectiveness of the treatment used.

## Technique of Lumbar Puncture.

Of the operation itself I hesitate to speak, in that it is so simple, yet disappointments are fairly frequent and have been referred to as "dry taps." A dry tap indicates faulty technique, either the canal has not been entered or the lumen of the puncturing needle is not patent. Dr. Cabot[25] at your last State Meeting spoke of his experience with lumbar puncture. Incidentally it may be recalled that as a result of spinal puncture he believes that he saved a life. His direction "to start in the middle and push until you strike oil" holds good, but why in many instances we do not get "oil" bears investigation, therefore, a few practical suggestions resulting from experience in which failures were quite frequent may be of some value.

The failure to obtain fluid is always due to failure of entrance into the canal as any obstruction in the needle can be removed by a stylet. This failure to strike the canal is in a large measure due to the inability of properly estimating the amount of lateral deflexion necessary when the point of skin puncture is selected away from the median line. While Cabot said "the middle," yet most of our text-books recommend a point one or one-half a centimeter to either side of the median line in adults. The advantage offered by this choice is the greater width between the laminae of the vertebrae as compared to the spinous processes. I used the lateral method in a large number of punctures in which so-called "dry taps" frequently occurred. Since using the median line, failure to obtain the fluid occurs in less than two per cent of the cases on first puncture. I select the median line approximately midway between the third and fourth or fourth and fifth lumbar vertebrae. The needle is entered at right angles with the broad of the back and directed slightly toward the head. By selecting the median line we obviate the necessity of calculating the amount of lateral deflexion, which would bring the point of the needle in the neighborhood of the canal at a depth of six or more centimeters.

The position of the patient is also of importance. Some prefer the sitting position, yet I believe the lateral has many decided ad-

vantages. In the latter the patient can be more easily secured[26]: more flexion of the spine is possible and therefore greater width between the spinous processes and easier puncture. More important than this, however, is the fact that in the lateral position you do not have a column of fluid above the point of puncture. The difference of pressure of the spinal fluid at the level of the lumbar vertebrae between the upright and recumbent position has been estimated at thirty c. m. of normal saline according to Cassidy and Page [27].

Fluid removed in the recumbent position is more gradually taken and consequently the readjustment or equalization of pressure within the spinal canal and the cranial cavity is more gradual. This, I believe, accounts for the absence of practically any of the so-called disagreeable after effects. The continued lateral position during puncture and recumbent for at least twenty-four hours after is strongly advised. Another point to be remembered in this regard is that with the more gradual removal of fluid under a minimum of pressure impingement of the base of the brain at the foramen magnum is less likely and thus one of the dangers formerly referred to, is guarded against.

Strict asepsis is practiced during puncture. The needles of which it is wise to have several on hand, are boiled and handled like the instruments of any other clean operation. The skin over the lumbar and sacral region is made surgically clean, likewise the operator's hands. Several small test tubes, which are also aseptic, are used as receptacles for the fluid. The site of puncture after the withdrawal of the needle is massaged in order that the continuity of the passage be destroyed. This prevents leaking after the puncture. The wound is sealed with collodion and cotton and the patient kept in a recumbent position for at least twenty-four hours.

## The Examination of the Cerebrospinal Fluid.

Only that part of the examination which can be readily performed in a laboratory of moderate equipment will be considered. The bacteriological examination so very essential in many cases unfortunately requires a laboratory with special equipment. Every practitioner has not the facilities for these special examinations, but without doubt, the same would be performed at a State Hygienic Laboratory if the request were made. In such event, special precautions must be observed both during puncture and shipment, to prevent contamination.

A bacteriological examination, which is possible in a moderately equipped laboratory, is that intended for the isolation of the tubercle bacillus from a spinal fluid. The fluid from a case of tubercular meningitis will, after six or eight hours, form a fine film. This film formation is very constant and holds within its meshes the tubercle bacillus. The film can be removed intact, placed on a cover slip, dried, fixed and stained, following the technique employed for the search of the tubercle bacillus in sputum. However, a more satisfactory procedure, without doubt, would be to have this and other bacteriological examinations made at a laboratory properly equipped. This suggestion holds good for the serological examination. Either the Wassermann or its modification by Noguchi require trained workers and suitable equipment. An examination which can be performed by any practitioner, and which will give him a very definite knowledge as to the condition of the meninges, will be detailed below. It requires the use of a microscope, a blood cell counting apparatus and a few chemicals. The examination can be conveniently divided into the macroscopical, microscopical and chemical.

## Macroscopical Examination.

A normal fluid is clear and limpid, of slight alkaline reaction, with a specific gravity of 1005. The pressure with which it flows from the needle necessarily depends to a large degree upon the calibre of the needle, as well as the intra-dural pressure. In normal cases its pressure is given as low. This, however, is a perfectly arbitrary designation.

The factors which are altered in diseased conditions are the clarity and the pressure of the fluid. Changes in its specific gravity[28] and reaction are extremely slight and of no significance as far as known. Our first observation at the time of puncture concerns the probable intradural pressure. A special apparatus for the examination of the pressure within the canal has been devised by Cassidy and Page [27]. Crohn[29] describes another. From a practical standpoint the estimation of pressure has been of little or no clinical value, that is when the variation is within narrow range. Roubinovitch and Paillard[30] have made extensive experiments with the pressure of the fluid in various types of meningeal disease. Their results would indicate that the estimation of pressure in which slight variations are sought for is of little value from a clinical standpoint. They concluded that change of position, inspiration, expiration, cardiac action,

etc., all affect the pressure. Therefore, as a clinical measure an apparatus to estimate pressure is not necessary. A very high pressure is readily recognized at the time of puncture, likewise a very low pressure, so that the arbitrary scale of high, moderate and low is adequate for the routine examination. By high pressure is meant a fluid that comes in a stream. If the fluid comes drop by drop the pressure is designated as low. Moderate pressure is a variable rate between these two.

The normal fluid is clear and limpid, although many pathological fluids are likewise. Changes in the appearance of the fluid may be due to the presence of blood, a large number of nucleated elements and rarely bile. The presence of blood is readily recognized. When it is present to the degree of marked discoloration at the time of puncture, it may be due to the rupture of a blood vessel during the passage of the needle or it may be present in the fluid as a result of recent hemorrhage within the central nervous system. If the blood coagulates readily in the bottom of the test tube and if succeeding drops are less and less colored, it is blood resulting from the rupture of a vessel during puncture. If, upon centrifugation, the blood is entirely thrown down and the supernatant liquor is clear it is blood resulting from accidental contamination. Upon the other hand, if the blood does not coagulate and if the succeeding drops are equally colored, we can assume the blood was present in the fluid within the spinal canal. If, after centrifugation, the fluid retains a pinkish or yellowish color throughout, we assume that this discoloration is due to the lysis of the red blood cells in the spinal fluid and that this blood was present in the fluid for a considerable time previous to puncture.

Bile stained fluids are occasionally obtained. We had two such in which the fluid was unmistakably bile stained at the time of puncture. Both fluids gave the characteristic chemical reaction for the bile acids. Both fluids were obtained from cases of general paralysis, far advanced. The significance of its presence could not be explained.

A clear limpid fluid is invariably present in the degenerative conditions of the central nervous system. Tubercular meningitis usually gives a clear fluid. On the other hand, the meningitides, due to the meningococcus, staphylococcus, typhoid bacillus, pneumococcus, etc., usually give a fluid varying from slight turbidity to conditions in which it appears nearly purulent. A fluid that is not clear, indicates a pathological condition.

## The Microscopical Examination.

The microscopical examination, in so far as it concerns cytology, is to be considered. It will be recalled that normally we have from one to five nucleated cells in a cubic millimeter of spinal fluid. In pathological conditions this number is greatly increased and the type of cell in a certain class of cases is relatively increased. The method of the examination is, therefore, a quantitative estimation of the number of nucleated elements present in a given amount of fluid, and a study of the morphology of these elements. For this purpose, three well known methods are in common use. They are known as the Alzheimer, the French or Widal and the cell chamber methods.

The Alzheimer method for the cytological examination of the fluid is invaluable, when the purpose of the examination is a study of the morphological characteristics of the cells contained in the fluid. In fact, the results obtained by the other two methods cannot be compared to those of the Alzheimer in this respect. Unfortunately the technique is cumbersome and time consuming so that as a routine measure it cannot be employed. Furthermore, to date, the differentiation of the cellular elements in the fluid has been of little practical importance. In the Alzheimer method five c. c. of cerebrospinal fluid is collected in a centrifuge tube. To this is added ten c. c. of 95 per cent alcohol and the mixture centrifuged for one hour. Cornell[31] subsequently employs absolute alcohol, while May[32] of Binghampton, uses xylene. From six to ten hours is necessary to obtain a suitable coagulum at the bottom of the tube. This coagulum holds the cells, which were thrown down by centrifugation. The coagulum is removed, imbedded in paraffine and sectioned in a manner similar to a block of tissue. These sections are mounted and stained.

The French or Widal Method. This method is simple of performance and gives reliable information in the cytology of the fluid, from both a quantitative and qualitative standpoint. It has, however, certain disadvantages, chief of which is that it requires the use of a centrifuge and necessarily depends upon the efficacy of this centrifuge for its results. Collecting the cells from the centrifuge tube and the subsequent uneven distribution in the film are further sources of error[33]. In this method the fluid is collected at the time of puncture in sterile centrifuge tubes. These tubes must be sharp pointed. Four to five c. c. of fluid is taken into a tube and three or four drops of formalin are added at once. This is a suggestion of

Fischer's[34]. Its purpose is to preserve the cells and prevent the occurrence of a so-called degenerated cell. Kafka's[35] most recent communication emphasizes the use of a preservative. The fluid is swung at a high rate of speed, from twelve to fifteen hundred revolutions per minute for one-half hour. The tube is then emptied and allowed to stand inverted for several minutes. A freshly drawn capillary pipette is now introduced to the tip of the centrifuge tube and by capillary attraction the residue is drawn into this pipette. The contents of this pipette is blown out upon a freshly prepared slide or cover glass. Several droplets can be made, or following the technique of Kafka[20]. the contents of the capillary pipette is marked off into equal parts. Each part is blown out upon a measured area, one centimeter square. The droplet of fluid delivered upon the slide or cover slip is permitted to dry slowly in the air. When dried it is fixed with absolute methyl alcohol for five minutes and then washed with distilled water. The film is now stained. For this purpose any of the common blood stains can be used, such as Wright's, Nocht's, Leishman's, Jenner's, etc. If the stain used contains a fixative, of course methyl alcohol need not be used. When formalin was added to the fluid we found that Jenner's stain could not be used satisfactorily.

A method of staining used by Dr. Bybee and myself[33], which we found very satisfactory, and which was not affected by the presence of formalin, is as follows: Delafield's hematoxylin in weak aqueous solution for ten minutes; wash in distilled water and follow with a weak aqueous solution of eosin for five minutes; wash; dry between blotting papers. The stained film is examined under a 1-12 oil immersion lens, Zeiss, with a No. 8 eyepiece.

It has been found that normally we may have from one to five cells per field. In this method the field of a 1-12 oil immersion lens is taken as the unit. From twenty to fifty or more fields are counted and the average number of cells occurring in one field is given as the count. A count of ten or more lymphocytes per field is designated as lymphocytosis. Differential counts are possible in this method of examination, but as previously referred to are not as satisfactory as, nor comparable to, those made by the Alzheimer method. From a practical standpoint and from our present knowledge of the cytology of the spinal fluid the differentiation of a lymphocytosis from a leukocytosis is of importance. This differentiation can be readily made in a stained film. The classification into large and small lymphocytes, so-called plasma cells, endothelial cells, degenerated cells,

"Koernchen" cells, "Gitter" cells, etc., is of no clinical value, in fact, the types themselves are not clearly defined and much difference of opinion exists as to the origin of these cells as well as their nomenclature. A relative leukocytosis is present in the inflammatory conditions and a relative lymphocytosis is the rule in the degenerative conditions. Some observers have noted a relative lymphocytosis in tubercular meningitis and refer to it as of diagnostic importance.

The Cell Chamber Method. This is without doubt the most desirable method when the purpose of the examination is the estimation of the number of cells present. Its technique is exceedingly simple and requires only an ordinary blood cell counting apparatus and microscope. This method and the former one mentioned have been paralleled. Certain observers have commented upon their equal reliability. On the other hand, discrepancies have been reported by others who used both methods simultaneously and these latter observers have indicated their preference for the cell chamber method. The cell chamber method is performed in the following way: The red cell pipette is prepared previous to the time of puncture. A stain, known as the Fuchs-Rosenthal (four per cent solution of glacial acetic acid in distilled water, to which is added 0.2 per cent of methyl violet) is drawn to the point 0.7 of the pipette. The tip of the pipette is wiped clean and while held in the vertical position the stain is drawn into the mixing chamber, so that it coats the inner walls of the mixing chamber[33]. The spinal fluid, which is subsequently drawn into this pipette, mixes evenly with the stain. One of the objections offered to this method was the fact that occasionally red cells, which are frequently present to a greater or less degree, take the stain and confuse the count. This undesirable result does not occur when the stain is drawn into the mixing chamber before the spinal fluid is drawn into the pipette. After the pipette has been prepared the puncture is made. About two c. c. or less of spinal fluid are collected in a sterile test tube. From this the prepared pipette is filled, capped and thoroughly shaken. In ten to twenty minutes it is ready to be counted. Five Thoma Zeiss counting chambers are filled and with the aid of an Ehrlich eyepiece, one cubic millimeter of fluid is counted. A chamber with the Turck ruling is much handier than the Thoma Zeiss chamber, since nine-tenths of a cubic millimeter is thus counted with one filling.

Normally there are from one to five nucleated elements present in a cubic millimeter of fluid. Frequently none will be found in several cubic millimeters. In the pathological conditions under con-

sideration counts from ten to one thousand and more occur. A count of ten or more cells per cubic millimeter is designated a lymphocytosis. Counts ranging between six and ten are looked upon as very suspicious.

In the method just described the dilution of the cerebrospinal fluid with staining fluid is not considered. It will be recalled that this dilution is very slight; little more than one to two hundred. With practice it is possible in the cell chamber method to differentiate a lymphocyte from a polymorphonuclear leukocyte and for practical purposes, as formerly alluded to, this is the only differentiation asked for. Bigelow's[36] classification is the simplest and is readily made in the counting chamber. He divides the cells into two classes, one type he refers to as the "Monos." These are the mononuclear cells. The other type he refers to as "Polys."

The cell chamber method has the added advantage that very little fluid is necessary for an examination. Two c. c. are sufficient for both the microscopical and chemical examination. The entire procedure takes less than one hour and centrifuge is not required.

## The Chemical Examination of the Cerebrospinal Fluid.

The tests of importance and of practical value as well as ease of performance are those which detect an increase of the globulin constituents of the cerebrospinal fluid. This increase has been shown to occur very constantly in all parasyphilitic conditions of the brain and cord and in the acute inflammatory conditions. An increase sufficient of detection by the tests to be referred to later is evidence that a fluid is pathological. The inflammatory conditions do not clinically simulate the parasyphilitic and, therefore, a positive test common to both of these conditions does not detract from its value.

Of the tests employed for the detection of a pathological increase of globulin, the Noguchi butyric acid test is without doubt the most delicate. The Nonne Appelt and Ross-Jones tests likewise detect an increase of globulin. All these tests depend upon the precipitation of the excess of globulin. In the Noguchi test, butyric acid is the precipitant, while in the Nonne Appelt and the Ross-Jones, saturated ammonium sulphate is used for this purpose.

## The Noguchi Butyric Acid Test.

This test, when applied to the cerebrospinal fluid is performed in the following manner:

Cerebrospinal fluid, two parts (0.2 c. c.).

Ten per cent Butyric acid in normal saline, five parts (0.5 c. c.).

This mixture heated until it boils, then add at once, Normal Sodium Hydroxide, one part (0.1 c. c.). Heat to boil.

A positive reaction has the appearance of a definitely floccular or granular precipitate. As a rule, the reaction occurs at once. Noguchi sets a time limit for a positive reaction at two hours. The reaction, when positive, is unmistakable and should not be confused with the slight turbidity, cloudiness or opalescence, which practically all normal fluids give when treated with these reagents. The precipitate gradually settles to the bottom of the tube and leaves a clear supernatant fluid.

The value of this test is vouched for by many observers. Noguchi and Moore[37] found it positive in ninety per cent of the cases of general paralysis examined. A Wassermann performed in the same series of cases, was positive in only 73 per cent. Rosanoff and Wiseman[22], who reported examinations on four hundred and thirteen cases, found an increase of globulin by the Noguchi method in 97.7 per cent of the cases of general paralysis. Stern[38] reports 91 per cent positive Noguchi butyric acid tests in general paralysis. Farnell[39] found this test positive in 93 per cent of his cases of general paralysis. Dr. Bybee and myself[33] obtained a positive reaction in 92 per cent of the cases of general paralysis examined. The report of Strouse[40] upon the use of the Noguchi test confirms the observations of many others. He found a positive reaction in every case of tubercular meningitis examined, as well as the other acute meningeal infections. He reports that it was absent in meningismus and concludes that its absence is a valuable means of excluding an acute meningitis in conditions where its presence is suspected.

In the last series of fifty-five cases examined at Mendota, a lymphocytosis was in every instance accompanied by a positive Noguchi butyric acid test. Among these cases was one of acute meningitis, probably of meningococcal origin. The fluid in this case gave a very heavy and prompt floccular precipitate, which upon settling, occupied over one-fourth of the volume of fluid in the test tube.

### The Nonne Appelt Test.

This test has been divided into two phases. Phase one consists in the half saturation of a given amount of spinal fluid, with saturated ammonium sulphate. This mixture is permitted to stand

for a few minutes, when a cloudiness will occur. The amount of cloudiness is referred to as slight, moderate, heavy, etc. Nonne states that a slight cloudiness occurs in all spinal fluids. The second phase of this test consists in the filtration of the semi-saturated fluid of the first phase. The filtrate is treated with a few drops of acetic acid and heat. The occurrence of cloudiness denotes a positive reaction and means an excess of serum albumin.

Bisgaard[41] has refined phase one of the Nonne Appelt test. He makes various dilutions of the fluid with normal saline until he reaches the minimum amount that will develop a ring, when the diluted fluid is floated upon a saturated ammonium sulphate solution. From our present knowledge the relative amount of excess of globulin is of little or no significance from a clinical standpoint, and consequently the above mentioned modification does not warrant employment.

### The Ross-Jones Test.

This is simply a modification of Nonne Appelt's first phase. In this test the spinal fluid is floated upon a saturated solution of ammonium sulphate. The occurrence of a ring at the point of juncture indicates a pathological increase of globulin.

These various tests have been used simultaneously in a large number of fluids. Practically every fluid was either positive or negative to all of these tests respectively, with the exception of Nonne Appelt's second phase. This was not as constant as the Noguchi, the Ross-Jones or the first phase of the Nonne Appelt. In the last one hundred and fifty fluids examined as a routine the Noguchi and Ross-Jones tests were employed. They paralleled one another in every instance. The Noguchi is preferred over the other tests owing to the fact that the amount of precipitate varies apparently with the amount of lymphocytosis. Furthermore, it appears that early in the course of general paralysis, in fact, at a time when the characteristic physical signs are notably absent, the Noguchi is very prompt in its appearance and heavy in its precipitate. At the same time the lymphocytosis is high. The variation in the amount of globulin as judged by these reagents seemed over a wider field when the Noguchi was employed than when the Nonne Appelt or Ross-Jones were used.

### The Reduction Tests.

At first considerable significance was attached to the absence of a reducing body in fluids from cases of general paralysis and the

meningitides. Normally we have in the fluid a substance which will reduce a copper solution, such as Fehling's. It was found that this reduction did not occur in paretic fluids. This observation, however, is not confirmed by many recent observers. Heminway[3] has referred to the irregularity of this test in tubercular meningitis. Dr. Bybee and myself[33] reported fifty examinations in which reduction occurred in 23 per cent of the paretics and failed to occur in 44 per cent of the non-paretics, and we concluded that the test was of no value.

## The Mayerhoffer Method.

Mayerhoffer[42] found that the cerebrospinal fluid would reduce a permanganate solution. He claimed that the intensity of the reducing action of the spinal fluid was an index to the pathological condition present. His findings have not been confirmed. Quite recently Simon[43], who employed the Mayerhoffer test, commented upon its unreliability and cautioned that its findings might lead to erroneous conclusions.

## Conclusions.

1. Lumbar puncture can be performed with impunity.
2. It is a valuable aid in the diagnosis of all meningeal conditions.
3. It is a therapeutic measure in certain types of cases advocated by the best authorities.
4. The cytological examination for practical purposes need be no more extensive than the estimation of the number of cells present in a given amount of fluid and the determination as to whether the increase is a lymphocytosis or a leukocytosis.
5. The cell chamber method is essentially a clinical procedure, within the scope of every practitioner.
6. The Noguchi butyric acid test gives accurate information as to the increase of globulin, is reliable and easily performed.
7. The reduction tests are of no value.

## REFERENCES.

1. Holt, L. E.—Am. Jour. Dis. Child., 1911, 1.
2. Meara, F. S.—Arch. Ped. April, 1910.
3. Heminway, Josephine—Am. Jour. Dis. Child., 1911, 1, 37.
4. Lucas, W. P.—Am. Jour. Dis. Child., 1911, 1.
5. Dunn, C. H.—Am. Jour. Dis. Child., 1911, 11.
6. Sophian, A.—Arch. Ped. N. Y. Abst. Jour. A. M. A., Vol. LVI, 15.

7. Haden, J. F.—Johns Hopkins Hosp. Report, 1910, Vol. XV, 397.
8. Flexner, S.—Jour. A. M. A., Vol. LVII, No. 1, p. 16.
9. Flexner, S.—"Serum Diag. of Syphilis," by Noguchi, 2nd Edit., J. P. Lippincott Company.
10. Cushing & Crowe.—Johns Hopkins Med. Bull., April, 1908, 1909.
11. Skoog, Andrew L.—Jour. A. M. A., November 19, 1910.
12. Clowe, C. E.—N. Y. State Jour. of Med., Nov., 1910.
13. Friedlander, A.—Interstate Med. Jour., Nov., 1910.
14. Lauden, G. S.—Lancet, April 16, 1910.
15. Blake, C. J.—Boston Med. and Surg. Jour. Abst. Jour. A. M. A., Vol. LVII, No. 16.
16. Putnam.—ibid.
17. Richardiere, Jules Lemaire and Marcel Sourdel.—Abst. Am. Jour. Obstetrics, Sept. 1911, 585.
18. Mott, F. W.—Lancet, Nov. 18, 1911.
19. Rehm,O.—Nissl. und Alzheimers Histolog. und Histopathol. Arb., 1909. 111, 201.
20. Kafka, V.—Monatsch. F. Psychiat. u. Neurol. 1910, XXVII, 414.
21. Kirby & Garvin.—State Hospitals Bull., N. Y., Vol. II, No. 4.
22. Rosanoff and Wiseman.—State Hosp. Bull., N. Y., Vol. II, No. 4.
23. Javorski.—Abst. Rev. Neurol. & Psych., Vol. IX, No. 3, 144.
24. Miliair, Levy, Valensi.—Abst. Rev. Neurol. & Psych., Vol. IX, No. 9, 518.
25. Cabot, R. C.—The Wis Med. Jour., Sept., 1911.
26. Lorenz, W. F.—Journ. A. M. A., Vol. LVII, No. 16, 1287.
27. Cassidy & Page.—Rev. of Neurol. & Psych., Vol. IX, No. 3.
28. Levy, Valensi.—Abst. Rev. Neurol. & Psych., Vol. IX, No. 8, 451.
29. Crohn.—Jour. A. M. A., 1911, No. 13, 962.
30. Roubinovitch and Paillard.—The Alien. & Neurol, Vol. XXXII. No. 1.
31. Cornell, W. B.—Am. Jour. of Insanity, Vol. LXIV, 73.
32. May.—Pathol. Report, Binghampton State Hosp., N. Y., Sept., 1910.
33. Bybee and Lorenz.—Arch. of Intern. Med., Vol. VII, p. 38, 1911.
34. Fischer, O.—Prag. med. Wochnscher, 1904.
35. Kafka, V.—Zeitchr. f. d. Gesammte. Neurol. u. Psych. bet. 5, h. 2, May, 1911.
36. Bigelow, O. P.—The Amer. Jour. of Insanity, Vol. LXVII, No. 4, p. 745.
37. Noguchi & Moore.—Jour. Exper. Med., 1909, XL. 604.
38.—Stern, S.—Proc. Path. Soc. & Phila., 1910, XIII, 39.
39. Farnell, F. J.—The Amer. Jour. of Insan., Vol. LXVIII, No. 1. p. 123.
40. Strouse, S.—Jour. A. M. A., Vol. LXI. No. 16, p. 1171.
41. Bisgaard.—Monatssch. fur Psych. und Neurol., Vol. XXVIII, No. 2.
42. Mayerhoffer, E.—Wiener klin. Wochensch. XXIII. No. 18, 651.
43. Simon.—Wiener klin. Wochensch. Abstr. Rev. Neurol. & Psych., Vol. IX, No. 4, 195.

# IMPALING INJURIES OF THE PELVIS*

## REPORT OF CASE WITH REVIEW OF THE LITERATURE.

BY C. J. HABHEGGER, M. D.,

WATERTOWN, WIS.

As an introduction to this paper, I wish briefly to report a case of impalement on the handle of a pitchfork, which directed my attention to this class of injuries.

E. H., age 27, farmer, August 7, 1910. In descending from a load of barley, holding a pitchfork in his right hand, fell onto the handle of it, which in some way turned under him in such a manner as to enter the anus and impale him; when this happened he fell backward against the wagon and two of the tines breaking, threw him sideways to the ground. He removed the fork himself, and by pressing his hands tightly against the anal region, was able to walk to the house. A cursory examination at this time showed that the accident was of a serious character, as intestines protruded from the anal wound and after cleansing and hot wet dressing and a firmly applied bandage he was removed to the nearest hospital, in an automobile, a distance of twelve miles.

Examination four hours after the accident. A well nourished young man, mentality good, no evidence of shock present, pulse 100, temperature 100.8, respiration 34, Thoracic organs normal. Complains of intermittent, crampy abdominal pains and desire to void urine and some rectal tenesmus. The abdomen was quite tender, the muscles somewhat rigid, but there was no distension nor any visible peristalsis. The bladder contained about three ounces of clear urine. About the anal region there were extensive lacerations, both forward and backward; the anterior tear, about two inches in length, divided the spincters and extending forward in the median raphe of the perineum separated the fibers of the levator ani and the transversus perinei. The posterior tear of about an inch, only partially divided the anal sphincters. From the anus a loop of small intestines about a foot in length protruded, which were badly lacerated, but not perforated, dark bluish black in color and torn from its mesenteric attachment. The anterior tear was continued upward into the rectal wall as far as the region of the prostate. The rectum covering the prostate was not injured, but above that organ the rectal wall

*Read at the Sixty-Fifth Annual Meeting of the State Medical Society of Wisconsin, Waukesha, June 9, 1911.

was penetrated by an opening about four inches in length, which permitted the bowel to escape from the peritoneal cavity. The posterior wall of the rectum was not injured.

Operation five hours after injury. Ether anæthesia. The anal and perineal region were thoroughly cleansed and the protruded bowel wrapped in sterile gauze and replaced into the abdominal

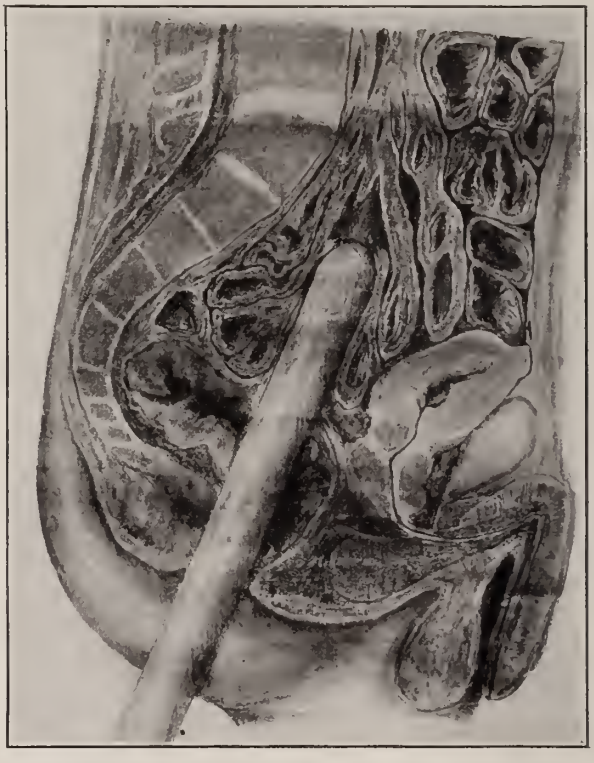


Fig. I. Anatomical relations of the pelvic viscera with bladder and rectum empty. The recto-vesical pouch is very low. This cut with fork handle in situ shows the manner in which the mesentery was injured—viz., fixation of abdominal contents at the time of injury by the greatly increased intraabdominal pressure and perforation.

cavity. A median incision was then made, extending from the umbilicus to the os pubis. In opening the peritoneal cavity the bladder, which extended abnormally high, was inadvertently injured. This opening was immediately closed by tiers of catgut suture, one for the mucosa and one for the peritoneal coat. The injured bowel was then delivered and found to be a part of the ileum, about six inches from the cecum. After carefully protecting the peritoneal

cavity the intestine was resected for the entire distance that it had been torn from its mesentery, between two clamps, the blind ends being closed by catgut suture and inverted by a purse string of linen. A lateral anastomosis was then made between the distal and proximal end of the bowel, using clamps protected by rubber tubing. The free edges of the mesentery were sutured by a continuous catgut suture and approximated to each other by a few stitches. The bowel was then carefully wiped off and returned to the abdominal cavity. After ascertaining that this cavity was not soiled by feces or other foreign material the patient was placed in the Trendelenburg position, the bowel packed in the upper abdomen and the wound in the rectum closed by a continuous catgut suture, including the peritoneum and muscular coats, but not the mucosa. After careful search for other injuries the peritoneal cavity was wiped out, especially the vesico-rectal pouch and filled with normal salt solution and a tubular drain inserted down to the line of suture in the rectum; the abdomen closed in the usual manner, an opening being left providing for this drain at its lower angle and dressings applied; the patient was then placed in the lithotomy position and the anterior rectal wall sutured by a single layer of catgut suture, taking in all coats. The sphincters of the anus were repaired after cutting away a small amount of severely lacerated tissues of the anus by approximating the cut ends with catgut; a gauze drain placed in the upper apex of the triangular wound in front of the rectum. No attempts were made to suture the levator ani muscle; the divided ends of the transversus perinei were united by a few catgut sutures and the skin closed, except just in front of the rectum, where the gauze protruded; a large tubular drain was also placed in the rectum to provide for drainage of secretion and a permanent catheter in the bladder. The patient was placed in the Fowler position on an air ring; food was withheld for about six days and enough opium given to quiet pain and arrest peristalsis; continuous salines were not administered, because of the condition of the rectum; there was some little shock present after the operation from which the patient quickly revived. He made an uneventful recovery in about five weeks with the functions of the anus restored to normal.

## Remarks.

This is one of the cases in which the victim himself held the impaling instrument in his hand in sliding down from the load of barley. The handle in entering the rectum probably tore the

perineum, anal margin and anterior rectal wall and after it had cleared the prostate by the falling of his body backward, the handle again penetrated the anterior wall some distance above the prostate and opened the peritoneal cavity above the recto-vesical pouch, and at the same time this change of direction tore the posterior anal margin. The patient thought that the handle penetrated about seven (7) inches, and we must assume that either the sudden increase of

Fig. II. Anatomical relations of pelvic viscera with bladder and rectum distended. The recto-vesical fold is greatly elevated.

intra abdominal pressure held the contents in a relatively fixed position, or that the mesentery was pressed against the sacrum and so injured in order to explain the injury with that depth of penetration. Several fortunate circumstances contributed to make such a result possible. The patient was a strong young man of good habits, the injury itself caused practically no shock and the rectum must have been entirely empty, for no feces was found, either in the peritoneal cavity or in the anal region.

## Historical Note.

In the middle ages, impalement, a form of execution of criminals, was practiced quite frequently, and in two ways. The condemned criminal was laid on the floor and the instrument of death, a stake or pale, was driven through any part of his body, or a stake was introduced into the rectum and the so-impaled subject placed in an upright position so that the weight of his body drove the stake upward until the body was totally impaled and death ensued.

These two forms of execution illustrate in a general way the modus operandi of all impaling injuries. In the first, the stake or pale is the active agent and the body is passive; whereas, in the second form, the body is active and the pale is forced upward, because of its weight. A painting by Albrecht Dührer in the Albertina in Vienna, depicts the first, and an etching in "De Crucis," by Justus Lipsius, the second; pictures by contemporary artists, who give us a graphic representation of these horrible means of torture and death.

Another form of execution, which was practiced in the middle ages, and which in fact was a multiple impalement, was that by means of the iron virgin, Eiserne Jungfrau.

In the museum at Nuremberg is a model of this instrument of death, which is daily shown to visitors. The figure is that of a woman, hollow and large enough to admit the human body. The front of it can be opened like a door and in places corresponding to the eyes, the chest, the abdomen and the pelvis, of the victim, are iron stakes, which when the lid is closed, penetrated the body of the condemned in those parts.

In Europe, isolated cases of impaling injuries of the pelvis have long been reported, but Madelung in 1890 was the first to designate them as such, and to direct attention to them as a distinct class of injuries. In 1900, Stiassny was able to collect from the literature, and otherwise, the report of one hundred and twenty-seven cases of pelvic impalements and using this material as a basis, in a classical monograph, described the anatomical and pathological changes and the clinical picture that those injuries present. In 1905, Tillman again reviewed this phase of abdominal surgery, and added fifteen (15) more cases to those already reported. Besides these two exhaustive publications, numerous other contributions have appeared at different times by Grabler, in his inaugural thesis, Lieblein, Staff, Ellbogen, Rubritin, Feldman, Brown, von Bunglner, Lichmann, Berger, Bourrough Cosens & Flick. In our own country, Z. Howe in 1840 collected a number of hay hook cases; Sargent, in

1857, reported a total impalement; Coats, in 1855, a series of cases, and Waller Van Hook, in 1896, forty-five (45) cases, going into the subject quite exhaustively.

## Definition.

Stiassny, in defining impaling injuries of the pelvis, limits them to those complicated, contused stab wounds of that region which are directed toward a body cavity and which occur in consequence of the falling of the body onto the impaling instrument, or in other words, he holds it for necessary that the body must be the active agent and the pale passive, and reject all other stab-wounds not occurring in that manner. His reasons for thus defining pelvic impalements are as follows:

They are contused stab-wounds, because the instrument producing them is usually blunt, thus tearing and contusing the tissues, instead of cutting them. They are complicated, because of the contused condition of the wound and the fact that infective organisms are carried into it, thus tending to inflammation and infection of surrounding tissue, and lastly, the word "impale," derived from the two Latin words "in" and "palus," means literally "to set on a stake," and implies that the body is the active agent in the production of the injury.

Madelung considers those impalements typical in which the direction of the injury is from below upward, and where the pale enters the scrotum, passes up along the spermatic cord to the inguinal ring, and then either further into the muscles of the abdomen, or because the body is bent forward, enters the peritoneal cavity.

Other writers on this subject, Neumann, for example, judging from his classification of these injuries includes, in contradistinction to Stiassny, those in which the pale is the active agent.

Since there are numerous impaling accidents in which the pale is the active agent in which the injuries are identical with those in which the body falls on the pale, it seems to me that a broad definition, including all those injuries as impaling injuries of pelvis, whether the body or the pale is the active agent in its production in which there is a contused, complicated stab-wound of this region, directed toward a body cavity, should be generally accepted.

## Nature of the Accident and Character of the Impaling Instrument.

That this kind of injury occurs most frequently in rural districts and to those who are engaged in agricultural pursuits, is shown by the large number of cases reported in which the victim was a farmer, or a farm laborer, 30 per cent, who in the course of their daily work are compelled to descend frequently from hay stacks, straw stacks, hay racks, wagons, barns, hay-lofts, etc., slip or fall on some farm implements or tool, etc., inadvertently placed in such a position as to impale them. Thus we find that pitchforks, hay hooks, rakes, shovels, hoes, pieces of wood or stakes, wooden supports, fences, etc., are frequently the impaling instruments. In some cases the unfortunate farmer carries the implement in his hand, which in some way gets twisted under him in such a manner as to impale him. Children playing in these surroundings, likewise fall upon these objects and are impaled, or in jumping over fences or walking on them, fall on the pickets.

Other vocations that furnish a certain quota of the accidents are those where the work is down under the surface of the earth, where frequent descents are made and where the victim, in making these descents also falls on his tools. or implements, etc., miners, well drillers, excavators, ditch laborers, etc. 20 per cent are frequently impaled on drills, picks, shovels, measuring rods, gas pipes, etc. Among those who work on ladders or in other elevated positions, such as window cleaners, painters, carpenters, servants, 15 per cent. This accident has happened by falls on broken ladders, on picket fences, on flower supports, on stakes and handles of various descriptions. In the home, falls down stairways, from step ladders, from piles of books, from chairs and tables, from any elevated position on brooms, on legs and spindles of chairs, on nails, pens, etc., furnish a number of these accidents.

In former years, soldiers were frequently impaled by falling on hidden stakes in pitfalls. So it may be said that almost every conceivable object, from a house key to a cow's horn, and from a cornstalk to a cordwood stick, has been in instances the impaling instrument and almost any fall from one while in a sitting posture responding to a call of nature, onto a root or branch to one from a second story window onto a picket fence.

It is interesting to note that pitchforks and hay hooks were the impaling instruments in twenty-six (26) per cent of a series of one

hundred (100) cases reported, wooden sticks or stakes in fourteen (14) per cent; picket fences in seven (7) per cent; brambles and roots of trees, iron rods and piping seven (7) per cent; legs and leans of chairs six (6) per cent; stems of plants three (3) per cent; hoe and rakes three (3) per cent; broom handles two (2) per cent. In cases where the pale is the active agent in the production of the injury, goring by infuriated bulls or cows, injuries while standing on platforms of cars or wagons by wagon pole and thills are recorded.

## Sex, Age, Frequency.

Impaling injuries of the pelvis occur three times as often in males as in females, for obvious reasons. The largest number occur between the ages of ten and twenty, thirty-two (32) per cent; next between ages twenty to thirty years, seventeen (17) per cent; between ages thirty to forty, ten (10) per cent; between the age of one to ten, and forty to fifty, five (5) per cent.

In regard to the frequency of this accident, there seems to be some diversity of opinion among the various authorities. Grabley believes that the accident is much more frequent than the cases reported would seem to indicate, and thinks that a good many cases are either not reported, because not serious in character, or that they occur in rural districts and are not seen by a surgeon. At any rate the general statistics seem to show that it is quite a rare accident.

Thus Neuman found that among sixteen thousand (16,000) injuries treated at the Berlin Krankenhaus Frederich Heim, in the course of eighteen (18) years, there were twenty (20) impalements of various parts of the body, the majority, of course, being of the abdomen or pelvis.

In the hospital Kant Krankenhaus at Aarau, Switzerland, located in an agricultural district, E. Bircher found that in the sixteen thousand (16,000) surgical cases treated since 1887, there were two (2) cases, a third occurring in private practice. In the Tübingen clinic, during the past thirty (30) years, there were four (4) cases treated. In our country the Mayos, located also in an agricultural community, have treated three (3) pelvic impalements since 1889. These reports would seem to indicate that the accident is quite rare, and it is a fact, that a great many surgeons of large experience have never treated or seen a case.

## Classification and Description.

In impaling injuries of the pelvis the point of entrance of the wound may be anywhere in the soft part surrounding or adjacent to the pelvis. There are impalements from above, in front and laterally, from the scrotal, the gluteal and perineal regions, through the anus, vagina, etc. The pelvic cavity may be penetrated through its inlet or outlet, through any of its natural foramina, the obturator, ischial, sacral, etc. The direction of the impaling accident is, in a vast majority of the cases, from below upwards, and more or less parallel to the long axis of the body.

Van Hook believes that the thighs act as deflecting surfaces to direct the foreign body, as it were, to the interischial space. The ischii, the pubis, the sacrum and the coccyx, then tend to carry it toward the middle of the pelvic outlet, and do no doubt the soft tissues tend to aid in directing the point of the pale toward the rectal tube.

According to Quenu, the anus is the most frequent point of entrance of impaling instrument and agrees with Van Hook that the buttocks direct the pale toward the anal opening.

In the male, impaled anywhere between the symphisis and sacrum, the blunt pale does not readily penetrate the tough perineum, and if not deflected backward into the rectum, enters the soft tissues of the scrotum, penetrates between the ascending rami of the os pubis and the spermatic cord and then further into the musculature of the abdominal wall, where it may enter the peritoneal cavity. To this form of impalement, which was described first by Madelung in 1890, and considered by him typical, attention has already been directed.

In the earlier literature on this subject, these injuries were classified from a regional point of view. Grabley, for example, divided them into three great classes.

First: Impalements through the abdominal muscles from in front and above; second, impalements through the perineum and vagina; and, third, impalements through the anus.

Neuman was probably the first to classify the injuries according to their severity, and makes the following subdivision:

1st. Not penetrating.

2nd. Penetrating, without injury to organs.

3rd. Penetrating, with injury to organs.

He further regards the extent and severity of the injury to be due to three factors, the character of the pale, the intensity and

direction of the impact, and the condition of the soft part at the moment of the impact.

Stiassny, in his classification, embraces both these points of view. He takes into consideration both the site of the injury and its severity. His classification has also been adopted by Tillman, and will probably be generally accepted. He divides all impalements into two great classes. In the first, the peritoneum is not injured, and in the second, the peritoneum is injured. In each of these the organs may, or may not be injured. He therefore distinguishes four grades of impalements and subdivides these again, according to the region or the organ that was injured.

### Grade One.

Impaling injuries of the superficial structures of the rectum or vagina, without perforation of the peritoneum. As subdivisions of this grade:

1. From the scrotum along the funiculus spermaticus (Madelung).
2. From the vagina.
3. Tearing of the perineum.
4. Penetration of the perineum.
5. Through the anus.
6. Aside or behind the anus.

### Grade Two.

The injuries indicated in Grade One, combined with extraperitoneal injuries of adjacent organs, principally of the genital organs.

1. Injury of the testicle and epididymis.
2. Injury of the urethra.
3. Injury of the bladder, extraperitoneal.
4. Injury of the uterus.
5. Injury of the prostate.

### Grade Three.

The peritoneum is penetrated, but no organs injured.

1. Madelung's impalement, without injury to organs.
2. Injury per vagina through the anterior or posterior walls.
3. From the peritoneum into the recto-vesical and the utero-rectal pouch.
4. Through the anus, tearing the anterior rectal walls.

### Grade Four.

The peritoneum is perforated, combined with injury to pelvic or abdominal organs.

1. Madelung's impalement, with injury to organs.
2. Per vagina, with injury to organs.
3. Per uterus, with injury to organs.
4. Penetration in the neighborhood of the anus.
5. Per anus.

### Extraperitoneal Impalements Without Injury to Organs.

In the Madelung impalement, a foreign body may penetrate a foot or more without injury to any important structure or organ. Thus, there are reported numerous cases of this type in which the pale penetrates as far as the costal arch and Tillman believes that the case of total impalement, which recovered, reported by Sargent, and cited by him, in which the entire body was traversed by the handle of a pitchfork, was a case of this character. The injuries may consist of slight tears of the scrotum with contusion, or those which expose the testicle, injure the muscles, nerves and vessels of the trigone; divide the vessels of the cord and those of the abdominal wall, tearing the abdominal walls and fracturing the ribs.

In the female, as already mentioned, impalements are much rarer than in the male, but wounds of this character of the vagina occasionally occur by falls on stakes or implement handles, etc. Warman also calls attention to a class of injuries of the genitals of women occurring in the sexual act, which he believes must be classed as impalement. In all these injuries the vulva may be lacerated, there may be hemorrhage, due to tearing of the corpora cavernosa, vena dorsalis, clitoris, and the bulbi vestibuli.

The urethra may be separated from the symphysis, when the pale penetrates more deeply and in a direction forward and upward. The vaginal wall may be injured to a greater or lesser degree, and even perforated without injury to the peritoneum, by shoving it upward in the pouch of Douglas or in its vesico-uterine reflection. This injury of the vaginal wall may cause severe hemorrhage.

In both male and female, the point of entrance may be the perineum. This is especially liable to happen in the female, when the perineum is relaxed. These injuries may consist in slight tears of this region or injuries of the floor of the pelvis, its vessels and

nerves, and penetration into the rectum or vagina, or both, with the formation of fistulous communication.

In both male and female, also, a stake may penetrate aside or behind the rectum, producing injuries of varying severity. In some cases of perforation of the rectum a traumatic rectal fistula may ensue. Hemorrhage from the hemorrhoidal arteries and veins, the plexus sacralis anterior, the plexus pudendus and their anastamoses may be very severe.

In the superficial injuries to the anus and the rectum are classed tears of the mucous membrane and the anal sphincters, with consequent incontinence of feces. In the deeper penetration of these structures, extensive laceration of the rectum may occur with tears of the perineum or perforation of the rectum, with the formation of recto-vaginal or recto-scrotal fistulas.

### Extraperitoneal Impalements With Injuries to Organs.

In scrotal impalements the testicle and the epididymis may be injured. This may be confined to one side or may be bilateral. The vas deferens may be torn and with it the pampiniform plexus. The urethra may be squashed against the pubic arch or it may be injured in varying degrees from simple tears of the mucuous membrane to complete rupture of all its coats and the surrounding structures and its separation from the bladder. These injuries of the urethra may be complicated by lesion of the blood vessels, usually the bulbo urethralis and the dorsalis penis.

Extraperitoneal perforation of the bladder may occur in four ways, according to Max Bartel.

1. The bladder may be directly penetrated from above or below, extraperitoneally.

2. In impalements from below, the impact of the bladder against the os pubis may be so severe as to rupture it in the space of Retzius "rupture per contra coup."

3. Because of trauma of its walls by pressure of the pale itself or pressure against the pelvic wall necrosis may take place at those points. The perforation of the bladder takes place most frequently through the anus or through the perineal tissue, though it may take place through the perineum, the vagina, in both its anterior and posterior walls, through the obturator foramina and through the bony walls of the pelvis itself, after fracture.

4. Impaling injuries may resemble a superpubic puncture. Injuries to the uterus, without opening the peritoneum are rare. The

normal uterus itself is so small and movable that it is easily shoved aside in penetrations of the vagina. In the pregnant uterus, however, such injuries may occur, which may cause abortion.

Impaling injuries of the prostate are also very rare. Sir Charles Ball mentions a fatal case of Tufnells, in which this gland was divided into two parts. The gland may be injured alone or with it the prostatic portion of the urethra and the bladder. As the vessels that supply it are insignificant the bleeding may not be severe.

### Intraperitoneal Impalements Without Injury to Organs.

In the type of Madelung's impalement, the peritoneum may be penetrated without injury to any organ, so also in penetration through the vagina, the injury of the peritoneum taking place in the vault, the pouch of Douglas; perforation through its vesico-uterine reflection, without injury to organs, is of rare occurrence. Penetration of the peritoneum may also occur in impalements through the perineum, gluteal region and the inner side of the thigh. By far the most frequent occurrence, however, is penetration through the anus. The pale entering the extraperitoneal part of the rectum and then by change of direction forward, due to the falling back of the body, penetrates the peritoneum near the reflection between the bladder and the rectum. Van Hook believes this perforation usually takes place between three to four inches from the anal opening.

### Intraperitoneal Impalement With Injury to Organs.

In Madelung's type of impalement, there may be injury to the bladder after the fracture of the rami of the os pubis, the pale or the bone perforating this organ. In this form of impalement also the intestines, liver, gall bladder, spleen, stomach and large vessels, especially those of the mesentery, may be injured.

The perforation of the peritoneum with injury to organs may further occur through the vagina, the uterus, through the rectum and in the neighborhood of the anus.

Of all the organs injured, the bladder is the most frequent. This organ can be injured either extra or intra peritoneally, or both, when penetrated through and through, or it may be torn from its attachments and displaced in the abdominal cavity.

The next in frequency to be injured are the intestines. They may be injured in four ways, according to Neuman.

1. The bowel may be directly perforated by the pale or contused so that it afterward becomes necrotic.

2. The bowel at some distance from the point of penetration may be caused to burst by the sudden increase of intra abdominal pressure, occasioned by the force of the impact.

3. The bowel may be perforated by being pressed against the neighboring abdominal wall, pelvic wall or spinal column.

4. The bowel is carried along by the impaling instrument and severed in its continuity or torn from its mesentery.

The mesentery also, in addition to being injured as indicated above, may be directly perforated or fixed against the abdominal and pelvic wall and penetrated or contused so as to become necrotic.

Of the organs that are rarely injured are to be mentioned, the uterus, ureters, kidneys, spleen and the liver.

### Multiple Impalements.

These injuries occur by falls on picket fences, spike rails, etc., and are, as the name indicates, in reality several impalements of the body occurring simultaneously, or nearly so. They may be multiple pelvic impalements or pelvic impalements combined with similar injuries of other parts of the body. Their classification and description, so far as they occur in the region of the pelvis, is the same as simple impalements. The penetration, however, of multiple impalements is usually not as deep as in single impalements, because one of the pales is liable to strike against a bony part of the pelvis, and in that way stop the force of it.

### Total Impalements.

Tillman described those cases as total impalements in which the pale enters the pelvic region, traverses the entire body and appears again in the axilla, thorax, etc., making a wound of entrance and exit.

Of the four cases reported in literature, one recovered, which he regarded as Madelung's impalement, without injury to organs. Another case lived twenty years and the other two died. Their histories are appended.

### The Foreign Body; Source and Character of the Infection.

In all impaling injuries, sight must not be lost of the fact that a foreign body has been introduced into the tissues which carries with it septic material and which may remain in the body as a whole, or pieces of it by splintering or breaking of the pale, may lodge in structures remote from the point of entrance. This foreign body

may be of a very diverse character and the amount of septic material it carries into the tissue depends to a great extent upon this, for a smooth object in its passage through the tissues is more liable to be mechanically rendered clean and germ-free than an irregular one. The amount of infection carried in by the foreign body also depends to some extent on the environment in which the accident occurs, this, in barnyards, seething with decaying organic refuse and manure the foreign body is more apt to be contaminated than in more sanitary surroundings. The pale also in its passage into the tissues frequently carries with it bits of clothing, skin, hair, bone, etc., which may contain a larger or smaller number of pathogenic micro-organisms.

The point of entrance, too, is usually a part of the body which, in spite of all care, is difficult to keep clean, and it may be the anus, vagina or rectum, passages which normally harbor pathogenic germs. These facts are merely mentioned to show that many factors, too numerous to give in detail, affect the amount of septic material carried into the body in this class of injuries. The foreign body may be broken at any point in its passage through the soft tissues, especially if it is of a friable nature. It may also be broken by striking against the bony pelvis, etc., or in attempts made at its removal. In extraperitoneal impalements it may lodge in the perineum, the gluteal region, aside of the rectum or in front of it, within the rectum or its walls, in the prostate, in the scrotum, along the spermatic cord, in the vagina, or its walls, in the abdominal walls, in the bladder or its walls, and the urethra. It may also lodge in the bony pelvis or by fracturing a bone may cause fragments of it also to become foreign bodies.

In intraperitoneal injuries it may lodge in the free peritoneal cavity or project into it from the abdominal walls or from intra or extra peritoneal organs. It may lodge in all of the organs, wholly or partly covered by peritoneum. The organs and structures lying retro-peritoneally are protected in the usual form of pelvic impalements by the promontory of the sacrum. It is more liable to lodge in organs having a firm anchorage to the parietes of the abdomen than those having a loose attachment.

(Continued in February Issue.)

# WISCONSIN MEDICAL JOURNAL

OFFICIAL PUBLICATION OF THE STATE MEDICAL SOCIETY OF WISCONSIN.

A. W. MYERS, M. D., Editor.
141 Wisconsin Street, Milwaukee.

J. P. McMAHON, M. D., Managing Editor.
141 Wisconsin Street.



Publication Committee:

A. J. Patek, M. D., Milwaukee.
O. H. Foerster, M. D., Milwaukee.
G. E. Seaman, M. D., Milwaukee
C. S. Sheldon, M. D., Madison.
S. S. Hall, M. D., Ripon.

Collaborators:

The Council.

M. R. Wilkinson.....Oconomowoc
G. Windesheim.....Kenosha
F. T. Nye.....Beloit
W. Cunningham.....Platteville
J. V. Mears.....Fond du Lac
H. W. Abraham.....Appleton
Edward Evans.....La Crosse
T. J. Redelings.....Marinette
O. T. Hougen.....Grand Rapids
R. U. Cairns.....River Falls
J. M. Dodd.....Ashland
H. E. Dearnolt.....Milwaukee



Annual Subscription. - - - $2.00. Single Copies, - - - - - $0.20

Address all business communications to
WISCONSIN MEDICAL JOURNAL,
504 Goldsmith Building, Milwaukee.

[Entered as second class matter, June 30th, 1903, at the Post Office at Milwaukee, Wis., under Act of Congress, March 3rd, 1879.]

Vol. X. JANUARY, 1912. No. 8


## EDITORIAL COMMENT.

### PRESIDENT'S GREETING.

When this issue of the Journal reaches you, the several component County Medical Societies will have held their annual meetings and elected officers for the ensuing year. All who read these pages are or ought to be members of their respective county societies, and are interested in the work to be done during the coming year.

It is hoped that you have chosen your best qualified members for the offices and especially for the office of Secretary, upon whom more than on anyone else devolves the responsibility for the welfare of the society. The Secretary has been given an arduous, time-consum-

ing, and generally thankless task, and it is his zeal for the welfare of the profession that has prompted him to accept it, not for the good it may do him. Now let the members do their part and give him all the assistance in their power. He is not hard to please,—just pay him your dues promptly and attend the meetings and you will make him happy. Don't neglect the dues and if you can't come to the meetings, just drop him a card or telephone him and say you are sorry. You know it is the little things that count in this life, and one of the biggest little things is a word of appreciation to the fellow who is doing something for you.

We hope to make the coming year a prosperous one in the State Medical Society. It will be so if the members will do their part. There are still too many eligible doctors outside the society. They cannot say it does not pay to be a member, for if they read Medical Journals, the Wisconsin Journal is worth many times the cost of membership. Do you remember the table at Waukesha, which was covered with State Journals, and how the one published by our society eclipsed them all? There was no fuss made about it, but the Journal was there to mutely tell the story.

It should be a matter of pride to every man to be a member of the state organization of his profession, and he will find it greatly to his advantage if he will think it over.

Now, with the advent of the New Year, when we form new resolutions and try to take a new start, let the doctors of Wisconsin resolve, each to do his part for the welfare of his profession and its organization in the state and component County Medical Societies.

Cognizant of your relation to suffering humanity, of the burdens you carry for others and of your unostentatious charity, the president of the State Medical Society of Wisconsin wishes you and yours all the joys of the New Year.

J. M. D.

## THE COUNCIL AND THE LEGISLATIVE COMMITTEE.

In the Annual Report of the Chairman of the Council of the State Medical Society which was published on page 385 of the December Journal there are several suggestions of great importance, one of which has to do with legislation affecting the medical profession. The paragraph referred to is as follows: "I am sure, too, that the Medical Society, through its legislative committee or otherwise, (and I think, myself, best through this council), should pay more atten-

tion to formulating, and introducing proper medical legislation, and then adopting such legitimate means as would ensure the placing on our statute books of such legislation."

It is tremendously important to every one of us that when legislation affecting the medical profession or the public health in any way is under consideration the voice of the organized profession should be heard clearly and distinctly and our attitude understood by the members of the legislature from every section of the State. We have been misunderstood and vilified more than enough in the past and it is time for us to clear the atmosphere.

The State Medical Society stands for honesty and efficiency and when these facts are known it can safely count on adequate legislative support. But when it comes to the point of making clear to the individual member of the legislature what honesty and efficiency mean when applied to matters of public health or medical practice the difficulties of the situation appear. No small committee can do this work. Circular letters are of little effect. It is only by close co-operation between the Legislative Committee and the Council and then between the Councilors and their County Medical Societies that effective work can be done. And now is the time to begin.

In the past the Legislative Committee has been expected to do too much. It should not be asked to orginate needed legislation and to oppose undesirable bills single handed. It has made a splendid record in the past but the willing servant should not be worked to death.

Suggestions from the Council and active co-operation by the Councilors and the County Medical Societies must all be combined to make the work truly effective. A definite program should be formulated and now is the time to do it.

## MORE ROOM FOR TUBERCULOSIS PATIENTS.

Arrangements have just been concluded by the Wisconsin Anti-Tuberculosis Association with the Lake County Tuberculosis Institute of Illinois, whereby Wisconsin victims of tuberculosis may be admitted there. In effect, this is practically as though another sanatorium has been opened in the State, and Wisconsin's tuberculosis patients, who are forming long waiting lists at the State Sanatorium Wales, and other crowded institutions for the care of the tuberculosis, and those who are barred by lack of residence qualifications, will welcome the opportunity for treatment.

The Lake County institution (philanthropic), which is in direct charge of Dr. W. H. Watterson, who may be reached at 125 North Genesee street, Waukegan, Ill., has recently considerably enlarged its capacity by the addition of a new infirmary and several new cottages. Patients are taken, not only in the incipient, but in farther advanced stages as well, and the charges are $10 and $12.50 per week.

Situated about three miles west of Waukegan, and forty miles south of Milwaukee, on Lake Michigan, the colony is in a position to be of great value to Wisconsin, affording some of the waiting patients immediate sanatorium care under excellent supervision, comparatively near home, though outside of the State.

The news will without doubt give the Illinois institution a waiting list of its own in the next month or two, in spite of the increased capacity. And in doing so, it will afford another illustration of the almost disheartening lack of accommodations that has hampered the work of prevention and cure since the beginning of the fight against consumption.

### 'TIS FOR SORE FEET.

The time honored and more or less efficient remedies for "sore feet," alum and tannin are the essential constituents of a much advertised nostrum called "Tiz." This in brief, is the result of an analysis made in the chemical laboratory of the American Medical Association (J. A. M. A., Dec. 3, 1911, p. 1853). The laboratory's report contains the following amusing account of a testimonial for the nostrum:

"Of course, testimonials are used in true 'patent medicine' style. We learn, for instance, that Mr. Crockett of Jeffersonville (state not mentioned), had been unable to walk downstairs for five years, 'except by stepping down on each step with one foot at a time' —the intimation being, apparently, that most people walk downstairs with both feet at a time. In any case, we learn that 'after the second treatment she walked downstairs one foot at a time.' The lady's husband, who sends in this testimonial, closes by saying: 'This is remarkable. Send five more boxes.' Doubtless by the time the fifth box is used Mrs. Crockett will be spry enough to slide down the bannisters."

### THE PRACTICAL VALUE OF VACCINATION AGAINST TYPHOID FEVER.

The following statements abstracted from a paper by Phalen and Callison speak for themselves:

"The latest figures available from the service of the British

Army were those of Col. R. H. Firth, R. A. M. C., covering the Colonial Army in India during the period from 1906 to 1910 inclusive; in 1906, among a military population 66 per thousand of whom had been inoculated, the typhoid rate was 15.6; the death rate 3.19; in 1907, the inoculated population having been 143 per thousand, the typhoid rate was 13.1 and the death rate 2.77; in 1908, the inoculated population having been increased to 225 per thousand, the typhoid rate was 14.5 and the death rate 2.76; in 1909, when the inoculated population was 613 per thousand, the typhoid rate was 8.9 and the death rate 1.58; in 1910, the protected population being 823 per thousand, the typhoid rate was 4.6 and the death rate 0.63 per thousand. In 1910, in a strength of about 70,000 men, 306 cases of typhoid occurred, in about 60,000 inoculated men there were only 155 cases. At the same time there occurred 151 cases among 10,000 men who were not inoculated. In the German army in Southwest Africa during the Hereros campaign from 1904 to 1907 there were 16,496 men who participated, 287 of whom took the inoculations. Among this force there were 1277 cases of typhoid fever, the rates being 5.09 per cent for those inoculated and 9.84 for the uninoculated. The death rates were still more striking; among the inoculated the rate was 6.47 per cent, while for the uninoculated it was 12.8 per cent.

"Nowhere did they get such convincing evidence in favor of the practice of typhoid immunization as from the records of our own Army. During the past three years 60,000 men have completed the three inoculations; but twelve cases of typhoid fever have developed during this time and no deaths have occurred.

"The record of the camp at San Antonio during the past summer was most instructive. The division of 12,000 men stationed here had all been inoculated and but one case of typhoid fever developed and that was in a Hospital Corps man who had not completed the three injections necessary for protection against the disease. During the same time there were 49 cases of typhoid fever with 19 deaths in the City of San Antonio. During the same period between three and four thousand men were in camp at Galveston, Texas, and no case of typhoid occurred among them, while the City of Galveston furnished 192 cases of the disease during the existence of the camp. The city and the camp had the same water, milk and food supply. About three thousand men were scattered along the Mexican border in small camps, many of them in localities where typhoid fever was present, yet only one man contracted the disease, and he recovered. It was inconceivable that with such conditions the practical abolition of

typhoid fever could have been effected without the use of the immunizing inoculations."

## ABUSES UNDER OUR PRESENT PATENT LAWS.

During recent years physicians have paid little or no attention to the abuses that have grown up in connection with the administration of our patent and trade-mark laws. Those who have studied the matter know that many of these are directly traceable to the imperfections of our patent laws, the difficulty of enforcing them or the general cumbersomeness of the legal methods that are involved in any attempt to correct them.

In the Journal A. M. A. (Nov. 25, 1911, p. 1780) appears a report of the Council on Pharmacy and Chemistry, appointed to consider the practicability of testing the validity of the patents for certain medicinal compounds.

This committee reports that while the abuses evidenced in connection with our present system of patents and trade-marks are real, they are too thoroughly well established to be eliminated by the adoption of well-meaning resolutions on the part of physicians or by a single suit at law.

The committee holds that the several problems are, however, deserving of careful study, with a view of evolving more equitable laws, a more rational enforcement of the provisions of such laws, and possibly an international patent protection on substances used in the treatment of disease or in the protection of the public health.

## EASE OF INSANE POPULATION.

While the population of the United States increased about 11 per cent in the interval between 1904 and 1910, the population in insane asylums increased about 25 per cent. The number of insane in asylums per 100,000 population increased from 186.2 in 1904 to 203.8 in 1910. The number of persons annually committed to hospitals for the insane per 100,000 population increased from 61.5 in 1904 to 65.9 in 1910. If these ratios are accepted as representing insanity rates, it would appear that the number of persons becoming insane, in a community comprising 100,000 persons, was greater by 4.4 in 1910 than it was in 1904. It must be remembered, however, that these figures include only the insane who are committed to hospitals. As to the number of cases of insanity not resulting in

commitments to hospitals the census has no data. It is entirely possible that the increase in the number of commitments per 100,000 population is not due to any considerable degree to an increased prevalence of insanity, but simply to the extension of this method of caring for the insane. It is a change which might result from an increase in the number of institutions of this class and from an increasing disposition on the part of the public to resort to such institutions. In this connection it may be noted that the number of institutions for the insane reported by the census increased from 328 in 1904 to 372 in 1910, an increase of about 13 per cent. The average number of inmates per institution increased from 458 in 1904 to 504 in 1910.

The figures compiled by the census afford a striking indication of the prevalence of insanity, if not an exact measure of it. It is somewhat startling to reflect that the 187,454 patients confined in hospitals for the insane make up a population larger than that of the city of Columbus, Ohio.

---

## ANNOUNCEMENT OF PROGRAM COMMITTEE.

The Program Committee asks for volunteer papers for the Wausau meeting in May.

It is planned to limit the number of papers as was done last year and to encourage discussion. It is believed that the wide expression of opinion brought out in prepared discussion makes the program of greater interest and greater scientific value. Since we plan therefore to, as it were, subordinate the papers to the discussions, few papers will be needed. But it is hoped that they will be snappy, timely, of scientific value, and in general of a kind that will be likely to excite discussion.

We ask you therefore to volunteer along this line. Send in your names and titles of your papers as soon as possible. We want many volunteers and many titles in order that the program may be diversified in subject so that the want of all hearers may be gratified. Of course some titles will have to be rejected, but please do not, if you happen to be one whose paper cannot be used, think the Committee has been personal or has used any other motive than the desire to present the best possible program to the society.

(Signed) A. W. Gray,
*Chairman Program Committee.*

---

## NEWS ITEMS AND PERSONALS.

---

**Dr. F. F. Newell,** Burlington, is in Europe.

**Dr. W. A. Ladwig,** Wausau, has been reappointed county physician.

**Dr. Harry Vedder,** Edgar, is reported seriously ill with typhoid fever.

**Dr. W. A. Ladwig,** Wausau, who has been ill with typhoid fever, has recovered.

**Dr. Herbert Saylor,** Merrill, has recovered from his recent siege of typohid fever.

**Dr. W. O. McBride,** Marinette, is ill at the Menomonie River Hospital with typhoid fever.

**Dr. J. Hansen,** Glenbeulah, who underwent an operation for appendicitis on December 25th, is convalescent.

The Madison Sanitarium at South Madison was damaged to the extent of $1,000 by fire on January 2nd.

**Dr. Helen Binnie,** Poynette, has been appointed to a position on the medical staff at the government hopsital at Washington, D. C.

The Burlington Hospital at Burlington was opened on November 17. Drs. Fehr, Prouty and Fulton, all of Burlington, are in charge.

**Dr. R. R. Chase,** Eau Claire, is laid up with a fracture of both bones of his ankle, the result of an accident in which his sleigh was overturned.

The Riverview Hospital at Grand Rapids, which has been closed since the 1st of November on account of lack of funds, was again opened early in January.

**Dr. G. A. Bading,** former health commissioner of Milwaukee, on December 6th made formal announcement of his candidacy for mayor on a non-partisan or citizens' ticket.

**Dr. W. G. Wiedemann,** Milwaukee, has returned from a six months trip to Europe, where he visited numerous hospitals and laboratories in London, Vienna and Berlin.

**Dr. T. D. Smith,** Neenah, sustained a peculiar injury to his hand, when a syphon which he was operating exploded, driving a glass tube through his hand. A jagged wound was cut in the member.

**Dr. William F. Whyte,** Watertown, met with an accident on December 14th, which will confine him to his home for several weeks. While walking on a hardwood floor he slipped and fell, fracturing his patella.

On December 22nd, suit was instituted in Circuit Court by District Attorney Zabel, Milwaukee, for the revocation of Dr. F. X. Schaeffer's license to practice in Wisconsin. Dr. Schaeffer is a fugitive from justice.

**Dr. Victor H. Bassett,** formerly of this State, was elected President of the Georgia Medical Society at the annual meeting held Jan. 9, 1912. Dr.

Bassett was also re-elected to the position on the Library Board, which he has held for two years.

**First Lieut. W. M. Edwards,** of Milwaukee, Third Regiment Wisconsin National Guard, was on November 28th promoted by Governor McGovern to the rank of captain. The promotion dates from Oct. 15, 1911. Captain Edwards is in the medical department of the guard.

**Dr. Horace Manchester Brown,** Milwaukee, is collecting statistics to support the complaint which he recently made before the Milwaukee County Medical Society regarding telephone rates and services. When the report is completed it will be turned over to the Society and the President will appoint a committee to present the matter to the State Railroad Commission.

**Dr. A. W. James,** Muscoda, appeared before the Railroad Rate Commission at Madison on December 8th, and entered a formal complaint against the Muscoda Mutual Telephone Company. The tenor of the complaint was that inadequate service was being rendered by the telephone company, who gave no service between the hours of 8:30 p. m. and 7 a. m., and but an hour and a half on Sundays.

**Marriages.** Dr. Ralph E. Morter, Milwaukee, and Miss Marjorie Hunt, Phillips, January 4th.

Dr. Jos. W. Upright, Grand Rapids, and Miss Ellen T. Kastman, Kenosha, December 21st.

Dr. W. F. Rowles, Galesville, and Miss Ida Mullen, Toronto, Canada. December 29th.

**Dr. Charles E. de M. Sajous,** Supervising Editor of the New York Medical Journal. Beginning with issue of December 9, 1911, Dr. Charles E. de M. Sajous, of Philadelphia, becomes the Supervising Editor of the *New York Medical Journal.* While Doctor Sajous will give up his private visiting practice, he will continue his work as a consulting physician, investigator, teacher, and author, and thus be in a position to keep in the closest touch with the needs of the medical profession.

The publishers of the *New York Medical Journal,* as well as its readers, are to be congratulated upon having obtained the services of Doctor Sajous.

**Removals.** Dr. G. H. Perrin. Wauzeka to Menomonie Falls.

Dr. Pickett, Wilson to Bayfield.

Dr. A. Foster, Kaukauna to Oconto Falls.

Dr. J. H. Prill. Sparta to Bloomer.

Dr. H. F. Ohswald. Oconto Falls to Prairie Farm.

Dr. H. A. Keenan. Edgerton to Stoughton.

Dr. M. A. Lee, Grantsburg to Superior.

Dr. Edward Evans at La Crosse. has removed his office to the McMillan Building.

Dr. L. J. Friend, Wausau to Abbotsford. He succeeds Dr. M. P. Andrews.

Dr. E. W. Miller, for the past four years assistant to Dr. E. P. Lockart at Norway, has removed to Harmansville.

Dr. John R. Taylor, recently of Madison, has opened offices in Beloit.

Dr. M. J. Gallogly, Waterloo, has disposed of his practice to Dr. M. T. Joice, of North Dakota.

Dr. E. E. Campbell, who three years ago disposed of his practice at Walworth to Dr. F. J. Nicholson, on account of ill health has recovered and will resume practice at Milton.

## AMERICAN MEDICAL ASSOCIATION.

### Conference on Medical Education, Legislation and Public Health.

A Conference on Medical Education, Legislation and Public Health will be held at the Congress Hotel (formerly the Auditorium Annex), Chicago, Monday and Tuesday, February 26 and 27, 1912, the session to begin at 10 o'clock Monday morning.

### Monday, February 26th.

On Monday the Council on Medical Education will hold its Eighth Annual Conference. A special address will be given by Mr. Frederick C. Hallett, Secretary of the Conjoint Board of England, on "The Organization and the System of Examinations of the Conjoint Examining Board of the Royal College of Physicians of London and the Royal College of Surgeons of England." Other important topics bearing on medical education and licensure will be discussed.

### Tuesday, February 27th.

On Tuesday there will be Conferences on Medical Legislation and Public Health. If necessary the session will be continued on Wednesday.

### PUBLIC MEETING.

On Tuesday evening a Public Meeting will be held at Orchestra Hall, at which addresses on Public Health will be delivered by Senator Robert L. Owen, of Oklahoma, and Senator Robert M. La Follette, of Wisconsin.

Council on Medical Education.
*N. P. Colwell, Secretary.*
Council on Health and Public Instruction.
*Frederick R. Green, Secretary.*

**Deaths.** Dr. Jos. E. Macneill, a former practicing physician at Mauston, died at Waukesha on December 3, aged 74 years.

Dr. S. D. Johnson, a practicing physician in Milwaukee for the past twenty years, died on November 21st, aged 60 years. He was a graduate of Hahnemann Medical College, 1879.

Dr. C. B. Ackley, a former resident of Beloit, died suddenly in Denver, Colo., on December 6th, aged 34 years. Dr. Ackley was born and raised in Beloit and resided there until 1900, when he removed to Bloomer. He resided at Bloomer until five or six years ago.

Dr. Hugh McKinnon, one of the pioneer physicians of Ashland, died at his old home at Alexandria, Canada, on December 17th.

Dr. McKinnon came to Ashland in 1887 and practiced there until November, 1911, when he left for Alexandria on account of ill health. Dr. McKinnon was a graduate of McGill University, Montreal. He was a member of Ashland County and the State Medical Societies.

Dr. Arthur Reitman, Milwaukee, died on January 6th, aged 33 years. Dr. Reitman was taken ill on December 28th with an attack of pleurisy. Later his case was diagnosed as gall-stones and symptoms of typhoid developed. He underwent an operation, but died shortly afterward.

Dr. Reitman was born in Milwaukee. He was a graduate of the Eleventh District and South Division High Schools and later attended the University of Wisconsin and the Wisconsin College of Physicians and Surgeons, graduating from both institutions.

He was a member of the Milwaukee County and State Medical Societies.

Dr. Francis M. Baker, Fond du Lac, and for a number of years a practicing physician at Lomira, died on December 30th, following an illness of several months' duration of leukemia.

Dr. Baker was born at Clairment, Minn., February 11, 1867, and when fourteen years of age came to Wisconsin with his parents, locating at Fond du Lac. He attended the public schools of that city and later entered the Oshkosh Normal, from which institution he was graduated at the age of 19. He graduated from the Northwestern University Medical School in 1893. After being connected with the Chicago Hospital for a year he located at Lomira, where he established a large practice. After five years at Lomira, Dr. Baker disposed of his practice and went to Berlin, Germany, where he took a post-graduate course in the University at Berlin. Returning, he located at Fond du Lac, where he practiced successfully up to the middle of last June, when he was taken ill and went to Milwaukee.

He was a member of the Fond du Lac County and State Medical Societies.

The American Red Cross desires again to invite attention to the exhibition in connection with the **Ninth International Red Cross Conference**, which will be held in Washington, D. C., from May 7 to 17, 1912.

The exhibition will be divided into two sections, which will be styled Marie Feodorovna and General. The former is a prize competition, with prizes aggregating 18,000 rubles, or approximately $9,000, divided into nine prizes, one of 6,000 rubles, approximately $3,000; two of 3,000 rubles each, and six of 1,000 rubles each.

The subjects of this competition are as follows:

1. A scheme for the removal of wounded from the battlefield with the minimum number of stretcher bearers.
2. Portable (surgeons') washstands, for use in the field.
3. The best method of packing dressings for the use at first aid and dressing stations.
4. Wheeled stretchers.
5. Transport of stretchers on muleback.
6. Easily folding portable stretchers.
7. Transport of the wounded between warships and hospital ships, and the coast.
8. The best method of heating railway cars by a system independent of steam from the locomotive.
9. The best model of portable Roentgen apparatus, permitting utilization of X-Rays on the battlefield and at first aid stations.

The maximum prize will be awarded to the best exhibit, irrespective of the subject, and so on.

The General Exhibit is again divided into two parts; the first will be an exhibition by the various Red Cross Associations of the world. The second will be devoted to exhibits by individuals or business houses of any articles having to do with the amelioration of the sufferings of sick and wounded in war, which are not covered by the Marie Feodorovna Prize Competition for the year. While the American Red Cross will be glad to have any articles pertaining to medical and surgical practice in the field, it is especially anxious to secure a full exhibit relating to preventive measures in campaign. Such articles will be classified as follows:

1. Apparatus for furnishing good water in the field.
2. Field apparatus for the disposal of wastes.
3. Shelter, such as portable huts, tents and the like, for hospital purposes.
4. Transport apparatus (to prevent the suffering of sick and wounded) exclusive of such apparatus as specified for the Marie Feodorovna Prize Competition.

As with the Marie Feodorovna Prize Competition, for this country only articles having the approval of the Central Committee of the American Red Cross will be accepted.

Diplomas will be awarded for exhibits in this section of the exhibition as approved and recommended by the jury.

Further information may be obtained from the Chairman, Exhibition Committee, American Red Cross, Washington, D. C.

It is perhaps to apparatus having to do with prevention of disease in armies that the energies of Americans have been specially directed since the Spanish-American War. Therefore, the last mentioned section of the Exhibition should make an appeal to them.

---

**Transient Hypermetropia in Diabetes Mellitus.** LUNDSGAARD, K. K. K., Copenhagen. (Klinische Monatsblatter für Augenheilkunde, 48, II, Juli 1910, p. 38), enumerates the 11 cases so far published with the different views of the authors and reports 2 of his own. In his cases the diminution of hypermetropia was not, as generally supposed, dependent upon the decrease or disappearance of sugar. Repeated measurements with Schioetz's tonometer revealed that the changes of refraction could not be due to an alteration of tension, and those with Javal's Ophthalmometer that the curvatures of the cornea was constant, so that the hypermetropia could not be produced by the cornea.

L. thus ascribes the development of hypermetropia to the lens, especially since both lenses of the 2nd case showed opacities and vascuoles, and surmises that the changes of the lens which produce hypermetropia are in some way or other related to the changes which cause diabetic cataract.

Another relation of transient hypermetropia to cataract may be found in the suddeness, with which the former always, cataract frequently, sets in. L. further refers to some cases in literature in which incipient cataract gave rise to hypermetropia. He recommends to search for opacities of the lens in future observations. C. Z.

---

# THE STATE MEDICAL SOCIETY OF WISCONSIN

ORGANIZED 1841

## Officers 1911-1912.

J. M. DODD, Ashland, President.

T. J. Redelings, Marinette, 1st Vice-President.

C. A. Armstroog, Boscobe, 2d Vice-President.

H. E. Dearhnlt, Milwaukee, 3rd Vice-President.

CHAS. S. SHELDON, Madisnn, Secretary.

S. S. HALL, Ripon, Treasurer.

ROCK SLEYSTER, Waupun, Assistant Secretary.

## Councilors.

TERM EXPIRES 1917.

1st Dist., M. R. Wilkinson, - Oconomnwoc
2od Dist., G. Windesheim, - - Kenosha

TERM EXPIRES 1912.

3rd Dist., F. T. Nye, - - Beloit
4th Dist., W. Cuoningham, - - Platteville

TERM EXPIRES 1913.

5th Dist., J. V. Mears, - Fond du Lac
6th Dist., H. W. Abraham Appleton

TERM EXPIRES 1914.

7th Dist., Edward Evans, - - La Crosse
8th Dist., T. J. Redelings, - Marioette

TERM EXPIRES 1915.

9th Dist., O. T. Hougen, - - Grand Rapids
10th Dist., R. U. Cairns, - - River Falls

TERM EXPIRES 1916.

11th Dist., J. M. Dndd, - Ashlaod
12th Dist., H. E. Dearholt, Milwaukee

## Delegates to American Medical Association.

L. F. Bennett, Beloit. C. S. Sheldoo, Madison. A. H. Levings, Milwaukee

## Alternates.

F. S. Wiley, Fond du Lac. Wilson Cuoningham, Platteville. R. G. Savle, Milwaukee

## Committee on Public Policy and Legislation.

A. W. Gray, Milwaukee, Chairman. J. P. McMahoo, Milwaukee. F. F. Bowman, Madisoo.

## Committee on Medical Defense.

G. E. Seaman, Milwaukee, Chairmao. S. S. Hall, Ripnn. A. J. Patek, Milwaukee.

## Committee on Prevention of Tuberculosis.

C. A. Harper, Madison. G. E. Seaman, Milwaukee. M. P. Ravenel, Madisoo
J. M. Beffel, Milwaukee. C. H. Stoddard, Milwaukee.

## Program Committee.

A. W. Gray, Milwaukee, Chairman.

## NEXT ANNUAL SESSION, WAUSAU, MAY 22, 23 AND 24, 1912.

The Wisconsin Medical Journal, Official Publication.

## LIST OF EXECUTIVE OFFICERS OF COUNTY MEDICAL SOCIETIES.

| County. | President. | Secretary. |
|---|---|---|
| Ashland-Bayfield-Iron | J. M. Meyers, Odanah | J. M. Dodd, Ashland. |
| Barron-Polk-Washburn-Sawyer-Burnett | H. B. Crommett, Amerv | I. G. Babcock, Cumberland. |
| Brown-Kewaunee | R. C. Buchanan, Green Bay | T. J. Ollver, Green Bay. |
| Calumet | W. Martens, New Holstein | J. A. Schmidt, Brlllion. |
| Chlppewa | A. W. Wilmarth, Chlppewa Falls | A. L. Beler, Chippewa Falls. |
| Clark | H. H. Chrlstofferson, Colby | E. L. Bradbury, Nellisville. |
| Columbia | B. C. Meacher, Portage | A. J. Batty, Portage. |
| Crawford | A. E. Dillman, Steuben | A. J. McDowell, Soldiers Grove. |
| Dane | Joseph Dean, Madison | C. S. Sheldon, Madison. |
| Dodge | L. A. Clason, Neosho | G. W. Henika, Beaver Dam. |
| Door | | |
| Douglas | T. J. O'Leary, Superior | W. E. Hatch, Superior. |
| Dunn-Pepin | A. F. Helsing, Menomonie | B. J. Steves, Menomonie. |
| Eau Claire | H. A. Fulton, Eau Claire | E. L. Mason, Eau Claire. |

| County. | President. | Secretary |
|---|---|---|
| Fond du Lac | G. F. Scheib, Fond du Lac | F. A. Read, Fond du Lac. |
| Grant | C. R. Pickering, Muscoda | M. B. Glasier, Bloomington. |
| Green | L. A. Moore, Monroe | G. S. Darby, Brodhead. |
| Green Lake-Waushara-Adams | G. E. Baldwin, Green Lake | R. H. Buckland, Green Lake. |
| Iowa | W. S. Lincoln, Dodgeville | W. M. Gratiot, Mineral Point. |
| Jefferson | James Cox, Jefferson | C. R. Feld, Watertown. |
| Juneau | C. O. Crou, Camp Douglas | A. T. Gregory, Elroy. |
| Kenosha | H. A. Robinson, Kenosha | C. H. Gephart, Kenosha. |
| La Crosse | C. H. Marquardt, La Crosse | G. W. Lueck, La Crosse. |
| Lafayette | J. C. Hubenthal, Belmont | Susanne Ortou, Darlingtou. |
| Langlade | M. J. Donohue, Antigo | J. C. Wright, Antigo. |
| Lincoln | C. C. Walsh, Merrill | Herbert Saylor, Merrill. |
| Manitowoc | J. R. Currens, Two Rivers | A. J. Shimek, Manitowoc. |
| Marathon | L. E. Spencer, Wausau | S. M. B. Smith, Wausau. |
| Marinette-Florence | H. F. Schroeder, Marinette | M. D. Bird, Marinette. |
| Milwaukee-Ozaukee | J. J. McGovern, Milwaukee | Daniel Hopkinson, Milwaukee. |
| Monroe | C. H. Cremer, Cashton | A. R. Bell, Tomah. |
| Oconto | J. B. Atwood, Oconto | R. C. Faulds, Abrams. |
| Ouelda-Forest-Vilas | J. M. Hogan, Oshkosh | C. A. Richards, Rhinelander. |
| Outagamie | V. F. Marshall, Appleton | J. P. Dohearty, Appleton. |
| Pierce | E. R. Holliday, Ellsworth | S. F. Rudolf, Ellsworth. |
| Portage | J. D. Lindores, Stevens Point | W. F. Cowan, Stevens Point. |
| Price-Taylor | C. E. Nystrum, Medford | G. H. McClure, Westboro. |
| Racine | E. A. Taylor, Racine | Susan Jones, Racine. |
| Richland | P. G. Lasche, Ithaca | A. D. Campbell, Richland Center. |
| Rock | W. J. Allen, Beloit | E. B. Brown, Beloit. |
| Rusk | G. M. Carnahan, Bruce | W. F. O'Connor, Ladysmith. |
| Sauk | | Roger Cahcon, Baraboo. |
| Shawano | E. Puckner, Wittenberg | Dr. Steubenvoll, Shawano. |
| Sheboygan | Edward Felter, Plymouth | W. F. Zierath, Sheboygan. |
| St. Croix | O. H. Epley, New Richmond | Boyd Williams, Hudson. |
| Trempealeau-Jackson-Buffalo | C. F. Peterson, Independence | H. A. Jegi, Galesville. |
| Vernon | John Schee, Westby | F. E. Morley, Viroqua. |
| Walworth | R. E. Rugh, Lake Geneva | M. V. Dewire, Sharon. |
| Washington | F. P. Leich, Jackson | S. J. Driessel, Barton. |
| Waukesha | J. H. Voge, Oconomowoc | R. E. Davies, Waukesha. |
| Waupaca | T. E. Loope, Iola | G. T. Dawley, New London. |
| Winnebago | B. C. Gudden, Oshkosh | W. L. Herner, Winnebago. |
| Wood | J. A. Jackson, Rudolph | J. B. Vedder, Marshfield. |

# SOCIETY PROCEEDINGS.

## CALUMET COUNTY MEDICAL SOCIETY.

The Annual Meeting of the Calumet County Medical Society was held at New Holstein, December 6, 1911. In the absence of the President, Dr. Martens, the Vice-President, called the meeting to order. Minutes of the previous meeting and special meeting (auto run) read and approved.

Dr. H. E. Luehrs read a paper on *Puerperal Sepsis.* Dr. Knauf, President, entered and took the chair. Then followed a general discussion on Dr. Luehr's paper.

The annual report of the Secretary and Treasurer read; moved and carried that same be accepted as read. We then proceeded to the election of officers, with the following result: President, Dr. William Martens, New Holstein; Vice-President, Dr. H. E. Luehrs, Hilbert; Secretary and Treasurer, Dr. J. A. Schmidt, Brillion; Delegate, Dr. C. G. Greengo, Chilton; Alternate, Dr. E. L. Bolton, Chilton.

The new President is to appoint a censor for the next three years.

Those present at the meeting were: Drs. Luehrs, Martens, Greengo, Fechter, Bolton, Niemann, F. P. Knauf and Schmidt.

J. A. Schmidt, M. D.,
*Secretary.*

## DANE COUNTY MEDICAL SOCIETY.

At the annual banquet and election of officers of the Dane County Medical Society, held at the Madison Club on Tuesday evening, January 2nd, the Society gave a vote of thanks to Dr. Joseph Dean, who assumed an active part in bringing to trial for murder, one Dr. A. R. Law, of Madison, who was found guilty of having caused the death of one of his patients by having performed an illegal operation upon her.

The following officers were elected:

President—Dr. Joseph Dean, Madison.

Vice-President—Dr. H. E. Purcell, Madison.

Secretary and Treasurer—Dr. C. S. Sheldon, Madison.

THOMAS W. TORMEY, M. D.,
*Secretary.*

## DODGE COUNTY MEDICAL SOCIETY.

Dodge County Medical Society held its annual meeting at Juneau. The following officers were elected: President, Dr. J. A. Clason, Neosho; Vice-President, Dr. H. B. Sears, Beaver Dam; Secretary-Treasurer, Dr. G. W. Henika, Beaver Dam; Censor, H. M. Holtz, Beaver Dam; Delegate, G. W. Henika, Beaver Dam; Alternate, H. B. Sears, Beaver Dam.

## DOUGLAS COUNTY MEDICAL SOCIETY.

Douglas County Medical Society held its annual banquet and meeting at the Commercial Club Rooms at Superior, on December 6th.

Following is the result of the election: President, Dr. Thos. J. O'Leary; Vice-President, Dr. R. K. Lomiller; Secretary-Treasurer, Dr. W. E. Hatch; Censor, Dr. L. A. Hoffmeier; Delegate, Dr. C. H. Mason.

An address on *Scientific Medicine* was delivered by Dr. F. S. Johnson, retiring president. Among others to talk were Attorney J. A. Murphy, Superior, and Dr. C. F. McComb, Duluth. Toasts were responded to by Drs. H. J. O'Brien, P. G. McGill, C. H. Mason, R. K. Lomiller and W. E. Hatch.

## GRANT COUNTY MEDICAL SOCIETY.

The ninth annual meeting of the Grant County Medical Society was held at Boscobel, Thursday, December 7th, President C. R. Pickering, presiding.

Members present were: Drs. L. G. Armstrong, J. C. Betz, C. A. Armstrong, C. S. Hayman, J. M. Lewis, J. E. Heraty, C. R. Pickering, G. G. Gobar, A. W. James, W. R. Coumbe, E. D. Orr, and M. B. Glasier.

Drs. M. P. Ravenel, Madison; M. A. Bailey, Fennimore; R. R. Harris, Prairie du Chien; A. D. Campbell and W. McKee, Richland Center; G. H. Perrin, Wauzeka, and F. S. Tuffley, Livingston, were guests of the Society.

We were greatly favored by having with us, Dr. M. P. Ravenel, of Madison, who gave a most interesting and practical address on the State Hygienic Laboratory. This was not Dr. Ravenel's first appearance before the

Grant County Medical Society, and the announcement that he would be with us, was a sufficient guarantee for an interesting meeting, and many made extra efforts to be present.

Election of officers resulted as follows: President, Dr. W. P. Hartford; Vice-President, Dr. A. W. James; Secretary-Treasurer, Dr. M. B. Glasier; Delegate, Dr. J. E. Heraty; Censor, Dr. J. E. Donnell.

Drs. R. H. Kinney, F. S. Tuffley and M. A. Bailey were elected to membership in the Society.

A souvenir pin, made from pearl shells from the Mississippi River, was presented to each member present. These pins were the gift of Dr. W. P. Hartford, with the request that they be considered the badge of our Society.

A splendid dinner, served at the Central House, by the courtesy of the Boscobel physicians, was much enjoyed and appreciated by all.

A unanimous vote of thanks was extended to Dr. Ravenel for his excellent address and his efforts to be with us; also to Dr. Hartford for his thoughtfulness and generosity.

Owing to the lateness of the hour, a part of the program was omitted, to be presented at our next regular meeting.

The next meeting will be held at Platteville.

M. B. Glasier, M. D.,
*Secretary.*

## GREEN COUNTY MEDICAL SOCIETY.

The Green County Medical Society held its annual meeting in Monroe, December 12, 1911. The following officers were elected for the ensuing year: Dr. L. A. Moore, Monroe, President; Dr. Ed. Blumer, Monticello, Vice-President; Dr. G. S. Darby, Brodhead, Secretary and Treasurer; Dr. N. A. Loofbourrow, Monroe, Delegate to State Convention; Dr. L. A. Moore, Alternate; Dr. J. F. Mauerman, Monroe, Censor.

Dr. Dean D. Lewis, Chicago, Ill., was introduced and read a paper on *Bone Lesions and an X-Ray Interpretation* differentiating between *Cystic Fibrous Osteitis* and *Malignant Giant-celled Sarcoma;* using a series of lantern slides for demonstration. Dr. Lewis' paper and his able presentation of this subject was a rare treat for the society. Dr. T. W. Nuzum of Janesville then read a paper on *The Study of 150 cases of Appendicitis* which was both interesting and instructive. Dr. C. C. Gratiot of Shullsburg then read a paper on *The Laity Knowledge of Medicine.* Dr. Loofbourrow then concluded the program with an interesting discussion of the use of *Electricity in Neuritis and Tuberculosis.*

Visitors present: Drs. Gratiot and Hayden, Shullsburg; Dr. Hubenthal, Belmont; Dr. Dean D. Lewis, Chicago; Dr. T. W. Nuzum, Janesville, and Dr. L. D. Rowe, Brodhead.

G. S. Darby, *M. D., Secretary.*

## GREEN LAKE-WAUSHARA-ADAMS COUNTY MEDICAL SOCIETY.

The annual meeting of the Green Lake-Waushara-Adams County Medical Society was held at Berlin, in the home of Dr. Prince, December 12, 1911. The members were entertained at lunch in a princely manner. There were

present the following: Drs. Walbridge, Prince, Scott, Devoe, Silverhorn, Wiesender and Parsons of Berlin; Riordan of Neshkoro; Baldwin and Buckland of Green Lake.

The meeting was called to order by Dr. Baldwin. The minutes of the last meeting read and approved. The transfer card of Dr. Forrest L. Parsons was accepted on motion of the Society.

The Society passed the following resolution:

"*Resolved*, that the State Delegate be directed to favor the motion that the County Secretaries be elected as delegates to the State Society, when the matter comes up for action."

Moved and carried that the bill of $5, incurred by the Society in the purchase of flowers for the funeral of Dr. T. E. Loope, be paid from the treasury.

A letter from Dr. A. G. Echternacht, of White Creek, offering his practice, with house and lot for sale, read before the Society.

The transfer of Dr. Wiesender from the Racine County to the Green Lake-Waushara-Adams County Society was accepted.

Election of officers: President, Dr. George E. Baldwin, Green Lake; Vice-President, Dr. Riordan, Neshkoro; Secretary-Treasurer, R. H. Buckland, Green Lake; Delegate, John Walbridge, Berlin; Alternate, R. H. Buckland, Green Lake; Censor, F. R. Silverthorn, Berlin; three years; Censor, J. A. Wiesender, Green Lake, one year; Program Committee, Drs. Riordan, Baldwin and Buckland.

Secretary's annual report read and accepted.

Program: *Personal Experiences in the Use of Serums, Vaccines and Anti-toxins.*

The discussion of this topic was opened by Dr. L. H. Prince, Berlin. Each man present told of some experience he had had with one or the other of these therapeutic agents. Favorable reports were made on the use of Gonococcus Vaccine in Gonorrheal Arthritis, Staphylococcus Vaccine in Boils; Flexner's Serum in Meningitis, and Anti-Typhoid Vaccine in Typhoid Prophylaxis.

R. H. Buckland, M. D.,
*Secretary.*

## JUNEAU COUNTY MEDICAL SOCIETY.

The Ninth Annual Meeting of the Juneau County Medical Society was held at the Brick Hotel, Camp Douglas, on Tuesday, December 5th, at eleven a. m. Members present: Drs. E. H. Townsend, New Lisbon; C. O. Cron and W. B. Parke, Camp Douglas; T. S. Lawler, Lyndon Station; C. J. Steele, Hustler; Thomas Gilluly, Union Center; C. H. Golden, Wonewoc; F. T. Field, C. C. Vogel, C. A. Vogel and A. T. Gregory, Elroy.

Meeting was called to order by the President, Dr. E. H. Townsend.

Minutes of the last meeting were approved as read. The President, Dr. E. H. Townsend, delivered a most interesting address. The following interesting papers were read: *The County Society, Its Aims and Objects*, Dr. A. T. Gregory. *Electricity, Its Uses and Applications as a Therapeutic*

*Agent,* Dr. W. B. Parke. *Prostatitis, Acute, Chronic Symptoms, Prognosis and Treatment,* Dr. F. T. Field. *Consultations,* Dr. T. S. Lawler.

A vote of thanks was extended Dr. Townsend for his address, also to Dr. Field for his concise and carefully prepared paper. A thorough discussion followed the reading of each paper.

The following officers were elected for the ensuing year: President, Dr. C. O. Cron, Camp Douglas; Vice-President, Dr. T. S. Lawler, Lyndon Station; Secretary and Treasurer, Dr. A. T. Gregory, Elroy; Delegate, Dr. C. C. Vogel, Elroy; Alternate, Dr. W. B. Parke, Camp Douglas; Censors, Drs. E. H. Townsend, T. S. Lawler and C. A. Vogel.

On motion it was decided to hold a public meeting at Mauston during the summer, the time to be decided by the President and Secretary. Camp Douglas was selected as the place for holding the next annual meeting.

Dinner was served at the Brick Hotel. Adjourned.

The day was an ideal one and all expressed themselves that they had enjoyed themselves and that they had been well paid for the time spent at the meeting.

A. T. Gregory, M. D.,
*Secretary.*

## KENOSHA COUNTY MEDICAL SOCIETY.

At the Annual Meeting held December 7th, the following officers were elected for 1912: President, Dr. H. A. Robinson; Vice-President, Dr. J. H. Cleary; Secretary-Treasurer, Dr. C. H. Gephart; Censors, Drs. Helen Harbert and J. F. Hastings; Delegate, Dr. C. H. Gephart; Alternate, Dr. H. J. Stalker.

J. H. Cleary, M. D.,
*Secretary.*

## LACROSSE COUNTY MEDICAL SOCIETY.

At the eighth regular meeting of the La Crosse Medical Society, held at the La Crosse Club Thursday evening, December 7, 1911, the following officers were elected for the ensuing year: President, Dr. C. H. Marquardt; Vice-President, Dr. G. Smedal; Secretary and Treasurer, Dr. George W. Lueck.

The first regular meeting for 1912 of the La Crosse County Medical Society was called to order Thursday evening, January 4th, by the President, Dr. C. H. Marquardt. Dr. Egan showed a specimen of Fetus papyraceus, gave a concise history of the case and an interesting and instructive talk concerning the etiology of these cases. He also reported a case of Syphilis in a woman, 25 years of age, whom he attended in confinement. She became infected when 11 years of age, showed tetiary lesions at the time the doctor attended her, but gave birth to a healthy child, which as yet shows no signs of syphilis. Her husband also shows no signs of infection. The case was discussed by Drs. Christensen, McArthur and Marquardt. Dr. Marquardt gave the history and showed microscopic sections of a case of carcinoma of prostate and bladder, which was discussed by Dr. Evans.

The President then read his annual address. Upon resolution the Secre-

tary was instructed to send same to the Wisconsin Medical Journal for publication.

GEORGE W. LUECK, M. D.,
*Secretary.*

## LANGLADE COUNTY MEDICAL SOCIETY.

Langlade County Medical Society held a meeting on December 15th, at the City Hall at Antigo. A number of subjects were discussed by the members, including the problem of co-operating with the various organizations in a fight for better health conditions. A number of talks of a clinical nature were given. The meeting was beneficial by giving an opportunity for the exchange of ideas. Following the program the members adjourned to Arnold's Cafe, where a lunch was served.

## MARATHON COUNTY MEDICAL SOCIETY.

The Marathon County Medical Society held its Eighth Annual Meeting at Wausau, on Friday, December 1, 1911.

Dr. F. E. Collins, Wausau, gave a paper on *Flexner's Serum in the Treatment of Epidemic Meningitis,* which was discussed by many of those present.

The following officers were elected for the coming year: Dr. L. E. Spencer, President; Dr. W. N. Damets, Vice-President; Dr. S. M. B. Smith, Secretary and Treasurer; Dr. J. R. Bryant, Censor; Dr. R. N. Jones, Delegate; Dr. F. C. Nichols, Alternate.

The meeting was then adjourned.

S. M. B. SMITH, M. D.,
*Secretary.*

## MENOMONIE COUNTY MEDICAL SOCIETY.

Menomonie County Medical Society held a meeting and annual election of officers on December 14th. Following are the officers for the ensuing year: President, Dr. Sawbridge, Stephenson; Vice-President, Dr. B. T. Phillips, Menomonie; Secretary-Treasurer, Dr. H. T. Sethney, Menomonie; Censor, Dr. Walter Hicks, Menomonie; Delegate, Dr. C. E. Elwood, Menomonie.

Dr. T. J. Redelings, Marinette, read a paper upon *Blood Pressure.* Dr. Eugene Axtell, Menomonie, read a paper on *X-Ray Treatment,* and Dr. B. T. Philips of Menomonie read about the *Medicine of Forty Years Ago and of the Present Day.*

## MILWAUKEE COUNTY MEDICAL SOCIETY.

At a meeting, held on December 14th, closer co-operation between the medical and legal professions was urged. Professor Gilmore, of the University of Wisconsin talked on *Expert Testimony of Medical Men.* There was a banquet, after which the following officers were elected: President, J. J. McGovern; Vice-President, Chas. H. Lemon; Secretary, Daniel Hopkinson; Treasurer, William Thorndike; Censor, R. G. Sayle.

The Legislative Committee was instructed to see that the license of Dr. F. X. Schaefer is revoked by the State. Telephone service was discussed, and some complaint was made regarding the service.

## ROCK COUNTY MEDICAL SOCIETY.

Rock County Medical Society held its annual election of officers at Janesville on December 26th. President, Dr. W. J. Allen, Beloit; Vice-President, Dr. W. A. Munn, Janesville; Secretary-Treasurer, Dr. E. B. Brown, Beloit; Censor, Dr. Fred Sutherland, Janesville.

Among those who addressed the Society were: Dr. Bayard Holmes, of Chicago; Dr. H. F. Burger, Beloit and Dr. C. G. Waufle, of Janesville. Dr. C. S. Sheldon, of Madison, Secretary of the State Medical Society, was also present and gave an address on *Harmony.*

## SHAWANO COUNTY MEDICAL SOCIETY.

At the annual meeting of the Shawano County Medical Society, held on Thursday, the following officers were elected for the coming year: President, Dr. Puchner, Wittenberg; Vice-President, Dr. Baker, Birnamwood; Secretary-Treasurer, Dr. Stubenvoll, Shawano; Delegate, Dr. Rothman, Wittenberg; Alternate, Dr. Ragan, Shawano; Censor, Dr. Gordon, Shawano.

## SHEBOYGAN COUNTY MEDICAL SOCIETY.

Sheboygan County Medical Society held a meeting at the office of Dr. O. B. Bock. About fifteen or twenty members were present. Dr. W. F. Zierath read a paper on *Tuberculosis,* and the Society adopted resolutions, favoring the campaign against the disease.

## WOOD COUNTY MEDICAL SOCIETY.

Wood County Medical Society held a meeting on December 20th, at the Wood County National Bank. Following is the program: *Is it Necessary or Even Desirable to Completely Immobilize Fractures,* Dr. K. W. Doege, Marshfield; *Prescriptions from the View Point of a Pharmacist,* Dr. W. G. Merrill, Grand Rapids; *A Talk on Obstetrics,* Dr. A. L. Ridgman, Grand Rapids. Paper, Selected, Dr. Frank Pomainville, Grand Rapids.

The election of officers followed the program: Dr. J. A. Jackson, Rudolph, President; Dr. V. A. Mason, Marshfield, Vice-President; Dr. J. B. Vedder, Marshfield, Secretary. The meeting ended with a smoker.

## WEST WISCONSIN DISTRICT MEDICAL SOCIETY.

The Eighth Annual Meeting of the West Wisconsin District Medical Society, Tenth District, was held at the Eau Claire Club, Monday, Nov. 27, 1911.

Meeting called to order by the President, Dr. R. R. Chase.

Minutes of the last meeting read and approved.

Out of town doctors in attendance:

Drs. Hurd, Abbott, Williams, Wilkowski, Doege and Mason, of Marshfield; Dr. Connell, Oshkosh; Dr. Smith, Wausau; Drs. Miller and Smith, Mondova; Dr. Moore, Merrilan; Dr. Crane, Osseo; Dr. Riley, Elk Mound; Dr. Yacke, Thorpe; Dr. Maxson, Osseo; Dr. Frisbie, Fairchild; Dr. Schofield, Greenwood; Drs. Butler, Egdahl, Howison, Menomonie; Dr. Cairns, River Falls; Dr. Winter, Augusta; Dr. Elkinton, Eleva; Dr. Sizer, Fall Creek; Dr. Francis, Bloomer.

The following program was presented: "Ureteral Catheterization as an Aid to Diagnosis, and a practical Method of Acquiring the Technique," Dr. H. F. Derge, Eau Claire; "Inguinal Hernia," Dr. V. A. Mason, Marshfield; "Fracture of Carpal Scaphoid," Dr. Joseph Smith, Wausau; "Newer Methods of Diagnosis in Cancer," Dr. F. Gregory Connell, Oshkosh.

Election of officers for the ensuing year resulted as follows:

President, Dr. J. V. R. Lyman, Eau Claire.

Secretary, Dr. E. E. Tupper, Eau Claire.

A banquet followed adjournment of afternoon program, presided over by Attorney Frank Farr, as Toastmaster, who did the occasion full justice.

The following is a list of the toasts:

"Medical Ethics," Dr. Crane, Osseo.

"The Doctor, the Patient, and the Patient's Friends," Dr. Stephen Williams, Chippewa Falls.

"A Hurry-up Call and an Auto," Dr. E. E. Moore, Merrilan.

Violin Solo (Selected), Dr. E. F. Sommermeyer, Eau Claire.

"Reminiscences of a Country Doctor," Dr. P. McKittrick, Eau Claire.

Vocal Solo (Selected), J. C. Culver, Eau Claire.

PROGRAM COMMITTEE.

Dr. R. R. Chase. Dr. R. Werner.

Dr. E. L. Mason.

BANQUET COMMITTEE.

Dr. E. E. Tupper. Dr. A. L. Payne.

E. L. Mason, M. D.,
*Secretary.*

## NEENAH-MENASHA MEDICAL CLUB.

Following a dinner at the Hotel Menasha, December 12th, the Neenah-Menasha Medical Club held a meeting. Dr. Marshall, of Appleton, presented a paper on *Surgery of the Kidneys.*

At the business meeting the following officers were elected: Dr. F. M. Corry, Menasha, President; Dr. J. R. Barnett, Jr., Neenah, Vice-President; Dr. I. E. Ozanne, Neenah, Secretary and Treasurer.

Regular meetings are to be held during the winter. The club, since its organization about a year ago, has proven a great success.

## THE ASSOCIATION OF
## COUNTY SECRETARIES AND STATE OFFICERS
## OF THE STATE MEDICAL SOCIETY OF WISCONSIN.

W. F. ZIERATH, M. D., Sheboygan
President.

M. V. DEWIRE, M. D., Sharon
Vice-President.

ROCK SLEYSTER, M. D. Waupun, Secretary.

NEXT ANNUAL SESSION, WAUSAU, 1912.

**Under this heading will be published each month, papers, editorials, sermons, reports of meetings and all that relates to the County Medical Societies of the state. To it all are invited and asked to contribute, especially the County Secretary. It is yours—make good use of it, and may it be of help to every County Society. It will be edited by Rock Sleyster of Waupun, secretary of the new association, to whom all communications for this department, reports of meetings and news matter should be addressed.**

### BOOSTER SERMON THE NEW YEAR.

At this time we pause for a moment to look backward, even to the starting point, and then we look forward into the year that is to be. This is the time of new beginnings. It is the time of renewed faith in things, of hopes to realize, ambitions to strive for. It is the time of expectations, of dreams to come true. The old year brought us some measure of success; but with it, it brought us some sorrow, some disappointments. Sometimes we murmured at the petty task, the hardship of a winter drive, an unkind word from a brother in the work we love. But if the old year brought us failure or success, let us look into the year to come with the optimism of the first year of practice, with the determination of youth to be worthy of our work, with faith in our brother co-workers in God's noblest calling.

This, then, is my wish for the new year; may its every day bring to you and to me the joy of work well done together.

ROCK SLEYSTER.

# MEMBERSHIP AND ATTENDANCE.*

BY H. A. JEGI, M. D.,
GALESVILLE.

This is a question of all importance to our County, State and National organization. I feel that I am tackling a subject entirely too large for me to handle in the time alloted me, with any idea of shedding any light.

How shall we answer the questions, Whom should the members consist of? Should every person holding a diploma or a license to practice medicine be pursuaded to join the County Society? We all know that one of the most distressing features of the profession is the under-current of disloyalty among its members, a desire to secure some advantage over others, by methods that come under the term "questionable". One man will go just as far as he can in bringing his name before the public in newspaper articles telling of what Dr. Blank does. They appear as news items, and are read by the very people they were intended for. If you interrogate on the subject, the physician can truthfully say he does not advertise; but the articles appear from week to week. Is this man eligible to membership? What are our limitations?

One of the active members of our county medical society was doing this and more, but now has reformed, as far as any one can see, all, I believe because of the influence of the society. Get the irregular man into the society, and give him work to do, elect him to office, and you may be surprised at the good work he will do. Discuss in a general way the advantages of the society and he will feel that a sort of a brotherhood has been formed. In short, let there be some uniform understanding that will enable the physician to know exactly where he belongs, what he is expected to do, and then let there be absolute harmony and co-operation with others as an aid in the performance of these duties.

If after trying all this the irregular man persists in his old ways, you had better turn him over to the care of some other member, and let him see what he can do, for I believe there are very few but what can be reached, and, even though you are not able to make a good ethical member of him, as a rule I believe he will harm the society and profession less, if he is in than out, and you may do him lots of good.

---

*Read at the Second Annual Meeting of the Association of County Secretaries and State Officers.

You will remember that the Shepherd rejoiced more over the one sheep that was lost but now found than he did over the ninety and nine that were safe.

The ideal man and physician does not need the society nearly as much as the other man, therefore let him alone, he will join of his own accord, with honor to the society. We need him on account of his constant good influence over the rest of us.

The third class of men are the ones that I believe bother the County Secretary more than either of the previous ones. The man who is fairly good, fairly ethical, and not at all a bad fellow in any way, but is so indifferent about the affairs of the society, has some fads of his own on which he spends all his extra time and energy, and pays no attention to the Secretary's letters and will not answer even though you enclose a self addressed envelope. If by some hook or crook you manage to get him into a meeting some time you may get his application and dues, but he never returns to a meeting, neither does he pay any more dues. This is the man I am unable to handle, still I now think I have the solution of the problem, only the remedy is rather severe, but if you will promise not to give the perscription away I will give it to you,—Turn him over to Dr. Sleyster.

Many of the counties in the state are not equipped with electric railway service, by which the physicians can readily reach a point of meeting convenient to all, but are compelled to drive anywhere from ten to twenty-five miles in order to attend the meeting and get home that same evening. These are hardships which the city man knows very little about, and perhaps cares less.

In our own instance, we meet more often outside of the county and state simply because we can meet more conveniently than anywhere within the county, and the physician living nearest our meeting point drives 18 miles if he would attend. Still I am pleased to say that the T-J-B county medical society is alive and holding regular meetings. Our programs may not be as scientific as they might be, but they suit our members and that is all we are looking for. We have done away with the bugbear of writing papers, and have replaced them with case histories. After the appointed member has read the history of a case it is discussed by the members of the society. This brings out very animated discussions, and we find that the alloted two hours are all too short.

Once a year have a banquet, a few toasts, and a general good time, strictly social; this meeting is always well attended, and I am sure its good effects are felt throughout the year. The interest in our society has grown steadily since this plan has been adopted.

# ANNUAL ADDRESS OF THE PRESIDENT OF THE LA CROSSE COUNTY MEDICAL SOCIETY.

BY C. H. MARQUARDT, M. D.,
LA CROSSE.

*Members of the La Crosse County Medical Society:*

I wish to thank you with appreciation for conferring upon me the honor of the office of President of this Society, the more so since the meetings during the period of my expired term have shown a plain lack of interest from month to month. From this it appears to me that you have not entirely lost faith in me, nor attributed the tendencies that our meetings have begun to assume, to me alone, although to a large extent I have felt a personal responsibility.

Allow me here to acknowledge the faithful service this Society has had from one of our lately deceased members, who served us in the official capacity of Secretary. His activity in the profession is known to all of you and his endeavor to serve us efficiently, at all times, you are also aware of. We should on this occasion, with all modesty, recall his untiring interest and his faithful service. His record as a to pay a tribute, though small it may be, to one who so well earned it.

A Medical Society in a city of our size or in any community irrespective of numbers, should at this age and stage of medical progress be a most influential body; its rank cannot be disputed and it will always be what it plans to be, but to gain this end each member must hold himself responsible.

A country full of natural resources, such as ours is, must necessarily develop a strong commercial aspect; this is a necessity and must to a greater or lesser degree prevade all our institutions from the State University down to each individual. However necessary this Commercial spirit is, it must have its limitations—we are a great business community and business is evident everywhere. When we meet our fellowmen in the morning and exchange the time of day, we invariably find, that if there is any time for further conversation, it will generally be, "How is business?" and this is often not in a spirit of how one is doing but generally if one is getting the better of the other fellows. The Golden Calf, that we were told about in Sunday School, stands out quite as brightly as it did in Moses' time. It is well that it does, for gold is a good reflector of light and the Medical Society, that flourishes because a few members are well imbued with the commercial spirit, will do well as long as this incentive lasts and then when the object is achieved, it will gradually go down.

We should look upon our Medical Society as a continuation of our Alma Mater; exclude and shake off personal interest for at least one day in each month and bring with us whatever is of interest to all of us. Then we will not have to be so urgent in getting the members together for they will come for their own interest and look upon these meetings as a continuation of learning and improvement.

Undoubtedly you have all heard bands playing in some stores while business was being transacted. Merchants who resort to this attraction have a little more commercial spirit than their neighbors and they make the buying of goods easier by playing soft tunes to their customers' ears. In a Medical Society, there must be no band playing, though there can be plenty of music. There is no objection to each individual physician surrounding himself by a little band, which can strike up a softer or louder tune as the occasion may require. His business sense in a measure requires this, for scientific attainment alone without business qualifications are not desirable.

It is our duty as a Society to raise the standing and efficiency of every man among us to help popularize all medical means that benefit mankind.

The efforts that have been brought forth by some of our first-class periodicals, such as Colliers', The Ladies Home Journal, and others, have done much to expose the patent medicine fraud; it has been the best course of education that the people have had on the subject and no doubt will have a good effect. The Council of the American Medical Association on Pharmacy and Chemistry has also done good service in exposing the patent medicine compounds, food fakers, and what purport to be scientific chemical combinations. This expose through the Medical Journal, has reached mainly the physicians and with excellent results, but what is needed more, is to reach the masses in an equally authoritive way and this should come through the health departments that are now being established throughout the cities of our land.

The necessity of a Scientific Health Department in all our communities is no longer objected to and its services are looked upon as a real necessity. We all know the kind of people that decry a health department and we also know their reasons. The League of Medical Freedom, demands the attention of not only every Medical Society, but of every honest medical man in the land. It is our duty as a Society to assist in popularizing medical advances. It goes without saying that there are many ways in which this can be accomplished; one of these certainly is to maintain an efficient health department, to support the same as the proper source through which

reliable knowledge and trustworthy guidance in preventing and conquering disease shall be, and can be relied upon. We can do more by supporting our health department and by making it the proper means to popularize scientific medicine than by denouncing any or all of the numerous cults, that arise like mushrooms, overnight.

It is our duty to support and stand by the Department of Health. It is not unethical for this department to avail itself of any measures that will make popular such means as can be relied upon for preventing disease. If the profession, through its support of a Health Department, can in some measure counteract the fakes and ready cures so recklessly advertised in our daily newspapers, our efforts thus united will bring forth results, of which the smallest among us can be proud.

---

**Chemical and Clinical Investigations on Cauterization of the Cornea.** GUILLERY, H., Coeln. (From the bacteriological laboratory of Prof. Czaplewski, Coeln, Archiv für Augenheilkunde LXV, p. 139.) Continued investigations enabled G. to completely elucidate the action of acids on the cornea, described in his former essays and reviewed in Ophthalmology. A peculiarity of the cauterization of the cornea by acids is, that the cornea soon after the primary opacities clears up and may remain transparent. After days and weeks the true nature of this suspicious clearness becomes apparent. The cornea has been fixated by the acid, in consequence of the action of acids on organic tissues, as utilized for histological purposes. Such a cornea is necrotic and without reaction. Lime, on the other hand, produces a permanent opacity, owing to a chemical combination with the organic substance of the cornea.

G. found that this peculiarity of the course of the primary opacity caused by acids is due to their action on the mucoid of the cornea. Mucoid is at first coagulated by the acids and then dissolved. The acids destroy the endothelium of Descemet's membrane, followed by edema of the cornea, which produces the secondary opacities and may lead to ectasia of the cornea and Keratoglobus.

Baths of ½ per cent solutions of hydrate of potash remove the mucoid sediments, and G. proved by a number of experiments that the further course is greatly influenced by the neutralization of the acids of hydrate of potash. He thus found in hydrate of Potash a very effectual remedy for cauterization of the cornea by acids.

Further experiments with lime showed that this also coagulates mucoid, though less than acids. The resulting opacities can be cleared in a few minutes by a 10 per cent solution of chloride of ammonium with 0.1 per cent tartaric acid. The histochemical conditions are illustrated on photographic plates. The practical importance of G.'s investigation make this interesting paper which deserves a close study in the original especially valuable.

C. Zimmermann.

---

# THE WISCONSIN MEDICAL JOURNAL

FEBRUARY, 1912.

## ORIGINAL ARTICLES.

### ARTERIO-SCLEROSIS IN THE YOUNG.*

BY DANIEL HOPKINSON, M. D.,

MILWAUKEE.

As Osler says: "Longevity is a vascular question." The integrity of the vascular system is essential to the fundamental and metabolic efficiency of every organ.

Of the many problems in Medicine there are few of greater importance than the early recognition of arterio-sclerosis, local and general. Much light has been thrown upon the etiology of this condition by recent investigation and systematic study of the condition as found in the young, suggesting that recognition of these etiological factors may often lead to the checking of the condition in its incipiency, if not to entire prevention, by intelligent after treatment of the acute arterial changes that subsequently lead to the development of arterio-sclerosis.

We can no longer consider this disease as only a senile manifestation and necessary accompaniment of old age, or when found in the young, as the result of syphilitic infection, but must recognize that it may develop at any time of life as a sequence of many and varied etiological factors.

The comparative frequency of arterio-sclerotic changes in the young has been determined only by systematic autopsies directed to the recognition of the condition in its early and advanced stages, frequently showing that this condition was most unevenly distributed and often demonstrated only by microscopic examination. The light

*Read at the 65th Annual Meeting of the State Medical Society of Wisconsin, Waukesha, June 8, 1911.

thrown upon the subject by these systematic autopsies has disclosed that heretofore only the most pronounced cases have been classified as arterio-selerotic changes. Failure to recognize these changes has often resulted from indifferent or negligent examination of the arterial system, examination often being limited to the heart only.

Etiology. The etiological factors of arterio-sclerosis in the young are the same as those leading to the condition in later life as (1st) mechanical; strenuous labor, increased blood pressure: (2nd) poisons; such as alcohol, lead, mercury, tobacco: (3rd) autointoxication; digestive fermentation, overeating, under exercise: (4th) infections, acute and chronic. Heredity, however, is a predisposing factor that will probably account for some cases developing in the young where other known causative elements cannot be found, as individuals born of parents who have died from diseases of the blood vessels are much less able to resist the ordinary causes of arterio-sclerosis and remain free from this condition.

H. B. Anderson[1] maintains that continuous high tension by mechanical strain produces changes in the aorta and coronaries. Strain and variation in pressure from muscular action in manual labor produce changes in the vessels of the extremities.

Blood pressure as an etiological factor is still a disputed question; Ronneberg[2] reports absence of increased blood pressure in 90% of cases, finding it very rare in uncomplicated cases of arterio-sclerosis.

Sawadda[3] found that of 206 cases only 12.3% showed increased blood pressure and states that while high blood pressure always suggests arterio-sclerosis, its absence, however, does not negative the condition.

Russell of Edinburgh attributes the hypertonus to the introduction of toxins into the system or autointoxication. On the other hand, W. H. Harvey[4] has experimentally produced arterio-sclerosis by increasing the intravascular pressure by intermittent compression of the aorta and concludes that change in blood pressure may produce arterio-sclerosis as shown by repeated compression of the aorta resulting in this condition; and that the arterio-sclerosis produced by the injection of adrenal and other substances follows as the result of increased blood pressure. From this it would seem that blood pressure may be etiological in nature or arise as the result of changes in the vessels.

Poisons. Alcohol probably acts indirectly by producing disturbances of the digestive tract resulting in autointoxication. The investigations of Cabot[5] do not seem to show this as a frequent causative agent.

Infections: Acute and Chronic. While acute infectious diseases often produce acute arterial inflammations, the persistence of these changes resulting in chronic or arterio-sclerotic conditions has not until recently received sufficient attention. Stengel[6] says seemingly complete recovery from acute infectious diseases when the heart and vessels have suffered will often subsequently show under stress or strain dormant conditions of the vascular system which advance progressively.

According to Thayer & Brush[7] of 95 autopsies of individuals dying from typhoid in 52 notes were taken of the condition of the aorta and in 30 of these sclerotic changes were observed, 21 described as fresh, notes were taken of the coronaries in 62, 19 showed definite sclerotic changes and in 4 others yellow plaques of the intima. In 13 of the cases the changes were considered recent. Of those cases giving history of severe infection rheumatism appears to be the disease following which the percentage of palpable vessels is highest and next to rheumatism comes typhoid.

Thayer[8] found that over 50% of cases above 20 years of age showed palpable radial arteries some time following the attack of typhoid, as compared with 17.5% found in healthy individuals. Typhoid is not infrequently the cause of arterial thrombosis and acute arteritis notably of the vessels of the extremities and the brain, the subsequent sclerotic changes would suggest the important role played by the acute infection.

The records of Symnitzky[9] in 138 autopsies of persons under 25 years showed sclerotic changes in the aorta in 27.5%; in 18 cases there was a history of previous severe infection, such as pneumonia, diphtheria, scarlet, typhoid, small-pox and measles, he suggests that acute infectious diseases play a more important role in the production of arterio-sclerosis than recognized previously.

Joseph Collins[10] reports 352 cases of arterio-sclerosis in which there was a history of malaria in 65, rheumatism in 87, scarlet in 15, typhoid in 62, pneumonia in 30.

According to Fremont Smith[11] the role of congenial syphilis has been greatly overestimated in arterio-sclerosis of the young; he collected 46 aneurysms at or under 20 years of age; histories of these cases make mention of syphilis in 12 instances but syphilis was positive only in one and of 144 reports of juvenile arterio-sclerosis collected from early literature he found reference in 55 instances to congenital syphilis but it appears as a positive cause in only 10. In all the cases reported by Symnitzky syphilis was negative. Wiesel[12] reports 80 cases of arterio-sclerosis autopsied during the active stage of various

acute infections with negative syphilitic history. Collins in a report of 800 cases found a history of syphilis in 13%.

Frequency and Age. In the earlier literature reference to arterio-sclerosis in the young is only made from isolated cases showing marked vascular changes and these references most frequently apparently for the purpose of demonstrating the infrequency of this condition in the young. It is only within the last decade from the systematic study of the pathology of arterio-sclerosis together with a more thorough investigation of the vessels in the young, that the frequency and importance of arterio-sclerosis before the age of maturity has been brought to our attention.

Symnitzky[13] reports in 108 autopsies on persons under 25 years of age, dying of various acute infections, sclerotic changes were found in the aortic walls in 38 or 27.5%. Wiesel[14] from 300 autopsies of the young dying from various infections found greater or less pathological changes in the arterial walls of nearly all cases. Thayer, W. S.,[15] found in a study of 189 individuals who had recovered from typhoid previously that in those between the ages of 10 and 50, 48.3% showed palpable radials.

Lanceraux[16] protests against the assumption that arterio-sclerosis is an affection of old age and observed it frequently between the 30th anl 40th year and says it runs a more rapid course in the comparatively young. Collins[17] conludes that arterio-sclerosis is a disease of maturity but is a common occurrence before the 40th year. We must dislodge the idea that arterio-sclerosis is not a common occurrence in the young; he has seen an advanced case in a boy of 13 afflicted with Hodgkins disease.

Pathology. The varieties of arterio-sclerosis found in the young are the same as those of later life: 1st. the nodose form, most frequent; 2nd. the diffuse form; 3rd. a combination of these; 4th. the syphilitic type. Time will not permit of a detailed description of these and the changes do not present peculiarities differing from those of the vessels in older age.

Distribution. The distribution of arterio-sclerotic changes is of great interest and probably accounts for many unreported cases. I quote H. B. Anderson[18]: "While angio-sclerosis is a condition affecting the whole vascular system still the stress of the causative factors in different cases falls upon different parts producing much diversity as to the frequency and degree with which different vessels are affected."

Harlow Brooks[19] reports 400 cases of arterio-sclerosis. Referring to the distribution he states that certain cases of arterial disease show

changes chiefly confined to the larger trunks, that is aortic, carotid and femorals, all peripheral vessels, the visceral arteries remaining practically free from disease; in other cases a considerable number of smaller and medium size trunks are involved; while in a third group the changes are microscopic in character and involve the smaller visceral branches where long standing they blend into one another.

Thayer[20] in his study of post-typhoid cases has noted the irregularity of distribution of these sclerotic changes, sometimes finding one radial involved and not the other.

Rokitansky gives the frequency of distribution of various vessels in the following order: 1st. ascending portion aortic arch; 2nd. abdominal aorta; 3rd. thoracic aorta; 4th. splenic and femoral, internal iliac, coronaries, cerebral, uterine, tracheal, subclavian. Seldom in mesenteric, gastric and hepatic. Rare in the pulmonaries.

## REPORT OF CASES.

Case 1.—Feb. 3, 1911. Male, age 32. Cause of death, suppurative pleuro-pneumonia. Indefinite previous history. Anterior coronary shows athermatous plaques and decided irregular thickenings.

Case 2.—Feb. 11, 1911. Male, age 16. Cause of death, myocarditis, obliterative pericarditis. History of rheumatism, negative syphilitic history. Both coronaries were greatly obstructed almost occluded by sclerotic changes. Vegetation on aortic side of semilunar valves at base flapping over coronary openings when valves were closed. This boy dropped dead while walking along the street. Coronary changes undoubtedly accounted for condition of myocardium resulting in death.

Case 3.—Feb. 18, 1911. Female, age 24. Cause of death, cerebral hemorrhage into internal capsule. Previous history of rheumatism and fainting spells. Negative syphilitic history. Coronaries greatly thickened, arteriosclerosis being so marked in these vessels that until the cranial cavity was opened I was under the impression that the sclerosis of coronaries was the cause of death. Upon opening the cranial cavity, however, the vessels of the brain were found to be thickened; rupture of a vessel had taken place resulting in hemorrhage into the internal capsule which was the cause of sudden death.

Case 4.—Feb. 28, 1911. Male, age 30. Cause of death, myocarditis, pulmonary tuberculosis. Atheromatous patches present in aorta, coronaries negative.

Case 5.—March 3, 1911. Male, age 34. Cause of death, septicemia following injury. Negative syphilitic history. Recent thrombosis of femoral vein which was the location of the seat of injury. Old atheromatous plaques of both coronaries and aorta with distinct thickening of the coronaries irregularly distributed.

Case 6.—April 26, 1911. Male, age 23. Cause of death, sarcoma of brain. Previous history injury to head. Syphilitic history negative. Atheroma of aorta and coronaries.

Case 7.—May 17, 1911. Male, age 20. Cause of death, fracture of skull, cerebral hemorrhage. Atheroma of aorta and anterior coronary.

These cases came under my observation during the last six months; they were selected from the records of 50 autopsies, 16 of which were upon individuals under 34 years of age. Of these 5 were new born, 1 was 4 years of age, and the rest, that is 11, were from the age of 16 to 34 years.

Seven of these latter cases as reported above showed arterio-sclerotic changes of the aorta or coronaries or both, in varying degrees. Two of the cases, one at the age of 16 years showed coronary arterio-sclerosis, and the other at the age of 24 years, cerebral hemorrhage, resulting in death from the vascular changes.

## Conclusions.

1st. Arterio-sclerosis is not an infrequent finding in the young.

2nd. Acute arteritis as the result of acute infectious diseases is often followed by permanent impairment of some part of the vascular tubes, as shown by later development of arterio-sclerosis.

3rd. Congenital and acquired syphilitic history is often negative in arterio-sclerosis developing in early life.

## REFERENCES.

1. H. B. Anderson, Am. Med., March 12, 1904.
2. Roneberg, Congress für Innere Med. Vol. XXI, 1904.
3. Sawadda, Deutsch Med. Woch., March 17, 1903.
4. W. H. Harvey, Virch. Arch. Vol. CXCVI, No. 2.
5. R. Cabot, Journal A. M. A., Vol. XLIII, No. 12.
6. A. Stengel, J. A. M. A., Sept. 17, 1904.
7. Thayer & Brush, J. A. M. A., Sept., 10, 1904.
8. Thayer, W. S., Am. Journal Med. Science, Vol, CXXVII. page 391.
9. Symnitzky, Zeit. fur Heilk., Vol. XXIV, 1903.
10. Joseph Collins, N. Y. Med. Journal, June 9, 1906.
11. Fremont Smith, Am. Journal Med. Sciences, Vol. 135.
12. Wiesel, Zeitschrift fur Heilk., XXVII, 1906.
13. Symnitzky, Zeitschrift fur Heilkunde, Vol. XXV, 1903.
14. Wiesel, Zeitschrift fur Heilkunde, Vol. XXVII, 1906.
15. W. S. Thayer, Am. Journal Med. Sciences, Vol. CXXVII, p. 391.
16. Lancereau, Bulletin de l'Academie de Medicine Paris, Vol. CXXII, No. 22.
17. Joseph Collins, N. Y. Med. Journal, June 9, 1906.

18. Am. Med., March 12, 1904.
19. Harlow Brooks, A. J. Med. Science, Vol. 131, page 778.
20. Thayer, Am. Jour. Med. Sciences, Vol. LXXVII, page 391.

**Discussion.**

Dr. G. C. Ruhland, of Milwaukee: The subject of arterio-sclerosis has a legitimate claim upon the interest of medical men, and when viewed from the standpoint taken by Dr. Hopkinson, it becomes of double interest.

There is no doubt that we are too prone to view arterial degeneration as indicative of syphilis and to associate it with old age. Yet reports have been made of spontaneous rupture of the aorta subsequent to arterial degeneration in children of ten years of age. Some cases show distinct atheroma at the age of two. All of this certainly proves that these vascular changes can and do occur at a very early age and much sooner than we are ordinarily given to expect.

Now, touching upon the etiology, speaking of arterio-sclerosis in the young, I believe that we must view it particularly in this light, that we have first of all to deal with a hereditary tendency. I think the element of hereditary predisposition is not nearly enough appreciated. We certainly know that racial predisposition is very definitely expressed. If we take the negro race we have a definitely, well-marked instance where hereditary predisposition is apparently influential. So, too, in the white races, undoubtedly hereditary predisposition is a factor, and I should imagine that particularly in the stress and strain of American life we would see early sclerotic degenerative changes of the vascular system, with greater frequency than perhaps in the more phlegmatic races.

The determining factors in the young are to be sought for in acute infectious diseases, and scarlet fever, typhoid and rheumatism are undoubtedly the most frequent.

As regards the question of blood pressure, I do not think that it plays a very important part. As a matter of fact the experiments performed by Romberg go to show that blood pressure and mechanical causes are of rather indifferent importance. Romberg has committed himself to the statement that a high blood pressure is indicative only of coexisting nephritis rather that of arterio-sclerosis per se.

We should bear in mind also the deteriorating influence that infectious diseases have upon the ductless glands, thyroid and suprarenal, and here they are causing changes which permit the development of toxins, which essentially are responsible for the destruction of the elastic tissue in the arterial vessel walls; and here we have the essential basis for early arterial degeneration.

For later adult life, from the 25th to the 35th year, I do believe that syphilis must be considered the one great cause. Without going into further details in this matter I would like to say that the bringing up of this paper serves a distinct purpose, for the reason that it emphasizes early arterial degeneration in the young, which is often overlooked, which consequently prevents us from circumventing more serious arterial degeneration, and oftentimes causes us to miss the correct diagnosis of an obscure symptomatology.

Dr. G. A. Landmann, Milwaukee: I am very sorry that I somewhat differ with Dr. Ruhland's etiological factors in arterio-sclerosis in the young. I appreciate the importance of hereditary syphilis as a factor, also that syphilis covers a multitude of sins in the etiology of disease. I will say that the prime causes have been overlooked more often than they have been found in the young. It has not been overestimated by the essayist in saying that early recognition of the factors in the young will prevent subsequent sclerotic conditions in the arteries, accepting only the view that the primary and important cause is a toxin either bacterial or chemical which has a secondary mechanical effect and diminishes the elasticity of the arteries, thereby favoring sclerosis. That a toxemia may be accompanied by a persistent supernormal arterial pressure is verified by animal experimentation. Papadia injected daily into the marginal vein of a rabbit's ear, 2 c.c. of adrenalin solution and found the following changes: 1st, hypertrophy of the muscular layer; 2nd, proliferation of the intimal coat; 3d, degeneration and necrosis of the muscular fibers; 4th, hyalin necrosis and formation of calcareous patches. Adrenalin acts mechanically, and in the same way can lesions be produced by simply compressing the abdominal aorta for one minute, once or twice daily for a period of three weeks, and the results produced are the same as produced with adrenalin. But in this instance it produces first, hypertension, then a true intoxication. This proves that the intoxication need not be general as in younger subjects it is the rule to have sclerosis restricted to certain vessels.

In order to reach a comprehensive conclusion it is necessary to review briefly the histological construction of the arteries, especially in relation to nourishment. The large arteries receive their nourishment directly from the blood stream through a seepage process which enters the media and the intima during physiological contraction and dilatation. Therefore it is easy to assume that in long standing toxemias such as rheumatism, malaria, typhoid, diphtheria, and scarlet fever, where the toxins of the bacteria invade the media and intima, that it produces first a conpensatory hyperplasia, followed by hypertrophic changes and the beginning of arterio-sclerosis. I wish again to emphasize the point Dr. Hopkinson has brought out in regard to acute infectious diseases which are as a rule followed by a period of arterial hypertension, and this should put one on guard against the formation of arterio-sclerotic changes in the young.

Dr. L. M. Warfield, Wauwatosa: I think before we speak conclusively of what arterio-sclerosis in the young means, we should define our term arterio-sclerosis. Do we mean true arterio-sclerosis in the sense of the pathologist who claims that arterio-sclerosis is always a lesion of the media of the arteries, or do we mean that any patch on the artery, visible macroscopically or microscopically, is arterio-sclerosis? If we mean that any patch that is visible on an artery is arterio-sclerosis, then I am willing to admit that arterio-sclerosis in the young is an exceedingly common disease, particularly after any acute infection. If, on the contrary, we confine our term arterio-sclerosis to a lesion of the media with compensatory changes in the intima and the media, then I will not admit that arterio-sclerosis is a very common disease in the young, following particularly the infectious diseases.

Now, we find pathologically that almost every aorta has some patches,

macroscopical patches of a yellowish color, which when cut into are evidently only fat beneath the intima; those are not arterio-sclerotic patches; those are the patches that are found very frequently following acute infections diseases; those are the patches which are found experimentally following the injection of such toxins as streptococcus toxin or colon bacillus toxin or the bacilli themselves into the blood of animals.

So that I believe that while arterio-sclerosis is present in the young I do not believe that we can say arterio-sclerosis is a frequent disease among young people.

Now, it strikes me that the whole question of arterio-sclerosis at any rate comes back to the question of what is the condition of the tubing with which the individual starts out in life.

We heard this morning that it depends entirely upon the individual's resistance in regard to a drug like arsenic, whether he reacts to it or not. Some can take a little and some can take much. So it is with the tubing in the arteries. There is no tissue in the body subject to more constant strain than the arterial tissues. So that the condition of the arterial tubing is of prime importance. That means that the individual must start out in life with perfectly good tubing, and if he does not there must be some reason in his ancestry that causes his poor tubing; and I believe that in spite of what has been said this afternoon, that of all the diseases there is none that produces such poor tubing as syphilis in the antecedents. I think that when you come down to the facts of what constitutes arterio-sclerosis in the young, you are going to find that a more careful inquiry into the history of antecedents, perhaps the antecedents in the second generation, will reveal that there has been syphilis in those antecedents, and it is that which produces the poor tubing.

Of course there are cases where arterio-sclerosis is found in the young at birth; there are calcified plaques on the aorta, cases of aneurism of the young, and cases of arterio-sclerosis of the true type found in the young. But those are not common diseases. They are collected from the literature, as Smith has collected 144 cases, but they are not so common as one would think.

And when we speak of arterio-sclerosis in the young we want to limit ourselves to the young and not to individuals over 20; because when an individual reaches the age of 20 he may have acquired syphilis or have passed through a prolonged attack of typhoid fever, either of which may produce true arterial changes; or he may have had other conditions causing prolonged hypertension which is another and important factor in the production of arterio-sclerosis.

Dr. Hopkinson (Closing): I would like to answer Dr. Warfield, especially as he gave a definition of arterio-sclerosis. First of all as to these atheromatous changes. They were all macroscopically visible, so that in all cases that I have subsequently examined miscroscopically I have always been able to demonstrate changes in the media. And in the case that I have referred to in which there were atheromatous patches, the vessel was thick enough to recognize medial changes as well as those of the intima.

Irrespective of that, these conditions do lead to changes in the media, and the purpose of the paper was to show that acute infectious diseases, even

though primarily only producing atheromatous patches in the intima, would subsequently lead to changes in the media, constituting advanced arterio-sclerosis—these changes which take place, not at the time of the acute infection, but as a result of maltreatment in convalesence. That is the point of the paper, that the pathology of this was of use to the general practitioner, drawing a conclusion that these acute infectious diseases produce acute arterial changes which result in early life in arterio-sclerosis.

I did not talk on arterio-sclerosis in childhood or infancy, but arterio-sclerosis in the young.

---

# IMPALING INJURIES OF THE PELVIS.*

## REPORT OF CASE WITH REVIEW OF THE LITERATURE.

BY C. J. HABBEGGER, M. D.,

WATERTOWN, WIS.

(Continued from page 463.)

How deep the foreign body must penetrate in order to injure the peritoneum, depends upon the type of the impalement. In the scrotal form along the spermatic cord it may penetrate a foot or more without opening it. In impalements through the anus it must penetrate a distance of at least fifteen c. m. to reach the peritoneal cavity as the lowest point of it, the recto-vesical reflection, according to Bircher, is located about that distance above the anal opening. This distance, however, varies somewhat in the individual and is greater when the bladder and rectum are distended.

Van Hook, in his experiments on the cadaver, was unable to come to any very definite conclusion, either in regard to the point of penetration or the distance the pale must penetrate in order to injure the peritoneum in anal impalements. It must be remembered that the peritoneum in that location is loose and may be shoved up without perforation or injury. If the foreign body enters the peritoneal cavity above this point through the rectal wall the great distensibility of this structure, as shown in a case of J. Collins Warren, in which a catsup bottle, ten (10) inches in length, was introduced into the rectum and could be felt under the abdominal walls, about half way between the umbilicus and the ensiform cartilage, without any injury to it or the peritoneum, makes it almost impossible to arrive at any definite conclusion in regard to this point.

In penetration through the vagina and perineum, nothing definite

---

*Read at the 65th Annual Meeting of the State Medical Society of Wisconsin, Waukesha, June 9, 1911.

can be said in this respect also. How far a foreign body must penetrate in order to injure the intestines cannot be determined as in total impalements the pale has been known to traverse the whole peritoneal cavity without injuries to them.

## Source of Infection.

In these injuries the infective micro-organisms are introduced into the body from three sources:

1. From without, introduced by the foreign body.

2. In its passage through the vagina or anus, the pale becomes contaminated.

3. From within, in injuries to organs such as the intestines, and in some cases the bladder.

The pre-disposing causes of the infection are,

1. The contused condition of the tissues and the organs.

2. The foreign body.

3. In injury of organs as the urethra or bladder, the extravasation of the urine or its accumulation in the peritoneal cavity ultimately leads to infection.

## Character of Infection.

Studies of the character of the infection have not been made, except in isolated cases of impalements. The micro-organisms introduced from without, are probably most frequently the ordinary pus germs, the staphylococcus and the streptococcus. In a case reported by Elbogen cultures showed the presence of tetanus bacillus, and the patient subsequently developed lockjaw. In penetration of the peritoneum through the anus or rectum, or in infection from injuries to bowels the coli communis alone, or with other organisms, probably plays the most important role. In two lethal cases of intra-peritoneal impalements, reported by Bircher, he assumed that the colon bacillus is the chief cause of peritonitis, because of the small amount of exudate which was strongly ichorous and of a very penetrating order. In these cases also, the formation of small gas bubbles pointed to that micro-organism. Kimmerle also obtained a pure culture of colon bacilli in an intraperitoneal penetration through the rectum.

## Symptoms.

The symptoms of impalements are referable:

1. To the injury produced by the foreign body in its passage through the tissues.

2. To infection and subsequent inflammation.

3. The retention of a foreign body of larger or smaller dimensions.

Of the symptoms caused directly by the injury the pain is described as of varying intensity, depending on the individual and to a great extent on the type of injury. The effect too of such injuries on the general condition in so far as the production of shock or symptoms of collapse, etc., are concerned also varies with these two factors.

The pain in injuries to the scrotum and testicle is excruciating, and frequently to this is added a great deal of shock. This shock has, in some instances, caused death. In impalements about the anus the pain is frequently described as of a burning character, accompanied by distressing rectal tenesmus. In lacerations of the perineum it is very insignificant as a rule. In injuries of the vulva and about the introitus it may be severe in some cases and accompanied by a great deal of soreness and a sense of fullness, caused by the swelling of the parts. Injuries to the rectum higher up are said not to be very painful, as its sensibility is very slight. Likewise injuries to the vaginal walls are not very painful.

In the Madelung type of impalement, even where the testicle is not injured, the pain may be very intense, owing to the extensive laceration of the skin and superficial tissues. Where organs, such as the bladder, urethra or prostate are injured, vesical tenesmus is usually complained of.

In perforation of the peritoneum the pain may not be severe, but the symptoms of peritoneal irritation may manifest themselves immediately after the injury. In injuries to the bowels and mesentery, besides the symptoms of peritoneal irritation, intermittent, crampy abdominal pain with vesical or rectal tenesmus sets in directly after the injury.

As a rule, it may be said, however, that the immediate symptoms caused by impalements are not severe. The patient frequently walks great distances to his home, or to a hospital, without being aware that he is seriously injured. In a case reported by Heath, and cited by Tillman, a patient walked two miles to a hospital, and died in collapse several hours later.

The appearance of the wound is as a rule not that of a clean cut, but, as already mentioned, an irregular, contused tear, the margins of which are swollen and oedematous and the tissues in the

immediate vicinity are crushed and discolored, showing in places extravasation of blood.

The hemorrhage in pelvic impalement is not severe, as a rule, because the direction of the penetration is parallel to the large vessels, and, therefore, they escape injury, but even when they are injured the bleeding may be insignificant, because the vessel is squeezed into other tissues and in that way its torn end closed. There have been, however, cases in which death was due to hemorrhage, one mentioned by Sifton, a lethal result, probably due to hemorrhage, and one by the Mayos, in which death was due to hemorrhage of the internal iliac.

In lesions of the spermatic cord and of the external male and female genitals, the base of the bladder, a solid viscus or the mesenteric vessels hemorrhage may be especially troublesome. The hemorrhage may be from the wound or it may be concealed and then cause, if severe, rapidly increasing anaemia, weak pulse, subnormal temperature, air hunger and great weakness. Injury to veins may also lead to inflammation and the formation of thrombi and this may lead to general infection.

Characteristic of injuries of the scrotum are the great discoloration about the wound and the formation of hematoma; the extravasation of blood may extend into the penis, or abdominal walls. In tears of the scrotum there may be prolapse of the testicle, due to the retraction of the elastic scrotal skin, which also gives it the appearance of a large loss of substance. The edges of these wounds have a tendency to become gangrenous. Following scrotal injuries, phlegmonous inflammation may occur, which runs a very severe course, with swelling, redness and emphysema and may terminate in gangrene and death. Further, this condition may follow an erysipelatous infection or an infiltration of urine of these parts in cases where the urethra is also injured. Abscesses may also form after these injuries, and they may contain foreign bodies and may later become discharging fistulas.

The testicle may be bruised or squashed, which may lead to inflammation and be followed by atrophy. It may also be dislocated into the inguinal canal, the abdominal wall, the abdominal cavity, under the root of the penis and backwards toward the rectum. Contused wounds of the testicle are frequently followed by abscesses and gangrene. Injury of the epididymis and the vas deferens may lead to inflammation and abscess formation or atrophy of the testicle.

The vas deferens may be torn and with it the pampiniform plexus, which may lead to gangrene of the testicle.

Impaling injuries of the abdominal wall may be very extensive, undermining the whole length of the abdominal walls. They present the usual characteristics of the impaled wound. There may be severe laceration of the muscles, and fascia, extending down to the peritoneum, in which location by injury to the overlying vessels, large hematomas may be formed. Abscess formation about foreign bodies are frequent occurrences. Large muscle wounds may be followed by hernia.

The symptoms of urethral injuries and their sequelae are more or less bleeding, especially if the corpra cavernosa are also injured. Voluntary urination is either impossible or rendered difficult or incomplete, and with it there is pain, or this function may not be disturbed. The urine is often mixed with blood and it may be passed out of the wound or there may be retention caused by closure of the urethra by coagula, bits of tissue, swelling of neighboring tissues or foreign bodies. This closure may cause extravasation of urine, which usually takes place when the first attempt at urination is made. The infiltration causes severe pain, extensive swelling of the scrotum, penis, inguinal region, inner side of the thigh and abdominal walls, and is frequently followed by phlegmonous inflammation and death, or abscess formation and urinary fistulas. Abscesses of the urethra usually point toward the perineum. Injuries of the urethra may lead to severe traumatic strictures, especially if this structure is torn across.

The extra and intra peritoneal injuries of the bladder have many symptoms in common; pain over the bladder, constant desire to urinate; retention or scant amount, or entire absence of urine; presence of blood in the bladder, all point to injury of this organ. In the extraperitoneal form the urine may be passed out of the wound while in intraperitoneal injuries the urine accumulates in the peritoneal cavity. Passage of the urine from the wound in extraperitoneal injuries takes place usually within twenty-four (24) hours after injury and the fistulous communication, which is established between the bladder and other structures or organs (vesico-vaginal, vesico-rectal, etc.), depending upon the location of the wound, may persist. A foreign body in the bladder may lead to cystitis, pyelitis, nephritis.

In extraperitoneal injuries also extravasation of urine with subsequent inflammation of a phlegmonous character, may take place in

the connective tissues planes of the pelvis, the perineum and the space of Retzius.

Injuries of the prostate and seminal vesicles may be followed by inflammation and abscess formation, which may extend to the peritoneum. In the former there may be extravasation of urine if the urethra is also involved.

In injuries to the ureters pain and tenderness is located often in the loin and the patient is usually able to pass urine, though the amount is diminished. The urine that escapes from the torn end of the ureter may accumulate in the peritoneal cavity or may discharge from the wound or may infiltrate the retro-peritoneal tissue, forming a tumor in that region.

Injuries to the perineum, or injuries in the neighborhood of the rectum, the gluteal region, may be of a penetrating character or may be extensive tears into the neighboring organs or structures. Through these wounds communication is established with the rectum, intestines, or bladder, and feces and urine may be discharged. Complete perineal tears have also occurred.

In injuries to the rectum there are two chief dangers, the first is the bleeding, and in cases in which the sphincters are not injured, it may be retained and the whole rectum up to the colon be filled. The second danger lies in the infection which may follow any severe laceration of the anus or rectum. Two factors here have direct bearing on this infection. The rectum itself contains decomposing and septic material, and if the sphincters remain intact after injuries, there is retention of the septic secretion and excretions. Following infection abscesses and phlegmon may form in the surrounding tissues, which may extend upward to the peritoneal cavity. Tears of the rectum may involve the vagina or there may be perforation of other structures forming fistulous communication. Tears of the sphincters are frequently followed by incontinence. In injuries of the rectum a peculiar condition sometimes develops, according to Koenig, which seems to be due to the absorption of fecal matter, and which may lead to death. This condition evinces itself by stupor or great restlessness, dry tongue and fecal odor of the breath.

Moynihan, in speaking of wounds of the abdomen, states that a distinction has been made between penetrating and perforating wounds, but that this distinction is for clinical purposes negligible, for in the great majority of instances, complete penetration of the abdominal wall implies also a perforation of some viscus. In impalements, however, it has been noted that there have been a great

many instances of penetration of the abdominal walls without injury to organs. Thus Tillman, in a series of one hundred forty-three (143) cases found nineteen (19) cases. The frequent escape from injury of intraperitoneal organs in penetrating impalements is probably due to the fact that the pale is usually a blunt instrument, which is more apt to displace a viscus than a sharp instrument. The question arises whether in these cases there are any symptoms or signs which point to penetration of the peritoneum alone. As a rule it may be said that practically all the symptoms referable to the peritoneum are due to infection, and while traumatism may cause some, they are transient, and may be not easily recognized. If infection occurs the symptoms are those of general peritonitis, the same that occurs in perforation of the intestines, except that they may be less severe or show more of a tendency to localize, due to the limited amount of septic material introduced. Does injury to the peritoneum in itself cause any depression of the general condition, such as shock? This, I believe, can be answered in the negative, although it must be admitted that as a whole the cases of penetration of the peritoneum present a more serious aspect at the time of injury than those without. Moreover, it must not be forgotten that it may be very extensively lacerated with injury, both to the parietal and visceral layers which may call forth symptoms. These symptoms are abdominal pain and tenderness, distention, vomiting, increased pulse rate, and temperature. Where there is prolapse of intestine or omentum, as is frequently the case, shock may be very pronounced. In penetration through the rectum or the vagina the probability of infection is much greater, because of the septic material introduced.

Immediate symptoms of intraperitoneal impalement with injury to organs may not be severe, although in this class of cases there is frequent shock and collapse present. This may be due, to a certain extent, to exposure of prolapsed bowel or omentum or to hemorrhage, due to injuries of mesentery or other vessels. The injury to the bowel causes a temporary paralysis. Extravasation usually takes place at once because the wound is large and in that differs from penetrating gunshot wounds, which as a rule do not leak until the bowels become distended. The contents may be discharged in the peritoneal cavity, causing peritonitis, or if the bowel protruded it may be discharged externally. Fecal fistula may follow all intestinal injuries.

Peritonitis almost invariably follows perforation of the bowel or in penetration of the peritoneum through the rectum or anus,

and it may develop in any injury when the peritoneal cavity has been opened. Foreign bodies retained in the peritoneal cavity favor its development, as does also the accumulation of urine in injury to the bladder or ureters. As rare sources of infection are inflammation of contiguous structures or tissues, as those about the rectum or the prostate and in injury of the scrotal tissue or testicle, the spermatic cord, or about the inguinal canal, the infection extending along the vas deferens to it. Injury of the pregnant uterus, with abortion and subsequent infection, may also be one of the rare sources.

The symptoms of peritonitis are abdominal pains and tenderness, distention, rigidity of the muscles, vomiting, rapid pulse and respiration, sunken, anxious features, free fluid in abdominal cavity, etc., the intensity of the individual symptoms presenting almost infinite variety.

In injuries to the omentum and mesentery, besides the symptoms common to any penetrating wound of the peritoneum, profuse hemorrhage may be encountered, which also is the case in injuries to a solid viscus.

A foreign body may lodge in the peritoneal cavity and may remain there without causing any subjective symptoms. In a case cited by Tillman, a large foreign body, which could be distinctly felt, remained in the abdominal cavity a great many years, causing no pain. As a rule, however, in whatever structure or organ they lodge they cause pain, tissue irritation, inflammation, abscess formation and continued suppuration. In the rectum they cause tenesmus, with bloody purulent discharges and may lead to ulceration and perirectal inflammation. In the bladder they cause cystitis, which may ascend upward into the ureters, causing a pyelitis or nephritis, or they may become incrusted and present the symptoms of bladder stone. They may be spontaneously discharged by ulceration and suppuration.

## Diagnosis.

The diagnosis of the character of the injury is, as a rule, easily made from the history. In children, however, in the absence of any external wound, there may be some difficulty in even establishing this. The diagnosis of extent of injury is in some cases difficult or impossible, even if an exploratory operation has been performed, and many lethal cases are not cleared up until an autopsy has been held.

In the scrotal impalements, Madelung advises that where the wound extends up to the neighborhood of the internal ring, the entire

wound canal, should be laid open and the extent of the injury determined by inspection and the proper surgical treatment to meet the indications (closure of the peritoneal cavity, reposition of the bowel or omentum) should then be instituted.

In extensive tears of the perineum or in the ergion of the anus or vagina, direct inspection with a good daylight and retraction of the wound edges may suffice to establish its extent, if the penetration is not very deep. In deep penetration the use of a speculum and headlight and sound may in some cases establish the diagnosis. Here careful observance of the signs and symptoms may determine whether an organ has been injured, such as the bladder, urethra, bowel or rectum. A careful, digital examination may also be of great value. In injuries to the rectum or vagina great care must be taken in the examination to prevent the introduction of more septic material into the peritoneal cavity, if that structure has been opened. Examination with speculum or in case of the rectum, with proctoscope, may in doubtful cases give the necessary information.

Injuries to the urethra may be determined by the observance of the symptoms and by direct inspection and the urethral sound. Bladder injuries are diagnosed from the signs and symptoms and examination with the cystoscope. The injection and inflation tests are not only unreliable, to distinguish extra from intra peritoneal injuries, but may be dangerous. A metal sound passed into the bladder may sometimes give the necessary information. In obscure cases a suprapubic or perineal incision and a digital examination of the bladder wall will be the simplest procedure to arrive at the accurate diagnosis, and at the same time, permit of the necessary treatment.

Injuries to the ureter are diagnosed from the symptoms and by introduction of ureteral catheter.

Whether or not the peritoneum has been opened is of the greatest importance. Where there is protrusion of the abdominal viscera there can be but little question. In obscure cases the sound by the depth it penetrates gives some information, and if after its introduction it is covered with feces and blood, points to injury of the intestines.

This method, would, of course, not be available in rectal impalements. In obscure cases if the patient's condition warrants, where the extent of the injury cannot be determined, but where penetration of the peritoneum or injury to intraperitoneal organs is suspected, an explorative operation is not only justifiable, but positively indicated to establish a diagnosis and institute the proper treatment. In regard to this, Stiassny says, "to wait for reaction, means to re-

ject the best part of the prognosis." In all impalements the careful examination of the foreign body, paying particular attention to its character, depth and direction of penetration as shown by its covering of blood and stool, and whether or not it has been broken, may be of great assistance in the diagnosis.

## Treatment.

The indications in impalements of the pelvis, are to remove the infective material and foreign bodies, relieve shock, control hemorrhage, re-establish the continuity of organs, if possible, and provide direct or indirect drainage. Every injury should be carefully cleansed and all foreign bodies removed; hemorrhage controlled by ligature or tampon. All crushed or gangrenous tissue or skin must be cut away and in this class of cases, efficient drainage with applications of hot dressings to stimulate circulation are especially indicated. Fairly clean cut wounds may be wholly or partially closed by suture, care being taken to properly restore the anatomical relations.

In impalements where there is a large undermined wound, as frequently occurs in the scrotal type, Madelung lays open the whole wound canal, removes all foreign bodies, thoroughly cleanses and curettes, then packs and sutures at a later period, when all dangers of infection are passed.

Tears of the scrotum are treated by cutting away the badly contused edges of the scrotal wound, drainage, suture, elevation of the parts and hot dressings. Injuries to the testicle, epididymis and vas deferens are treated conservatively by cleansing, reposition, suture, drainage, elevation and hot dressings and it must be remembered that severe injuries of these parts may lead to gangrene of the testicle or phlegmonous inflammation, with extension along the vas deferens to the peritoneal cavity, which may terminate fatally and which might have been averted by a castration. In slight lacerations of the testicle proper, with prolapse of the small seminal canals, suture with fine catgut of the albuginea is indicated.

Lacerations and tears of the perineum and vagina are treated in accordance with the rules laid down in gynecologic practice for the repair of lacerations of those parts occurring in childbirth, which they very closely resemble. Injury to the rectum and anus are treated by suture and sphincter plastic operation and drainage.

In injuries to the urethra in order to prevent the extravasation

of urine or the formation of traumatic fistula anastomosis of the cut ends should, if possible, be made, or if this is impossible, the introduction of a permanent catheter or a super-pubic or a perineal incision may avert that catastrophe.

In the extraperitoneal injuries of the bladder the danger of extravasation of urine is often averted and healing induced by the use of a permanent catheter. Here too, a supra pubic or perineal cystotomy permits of an accurate diagnosis and a careful hemostasis and drainage of the bladder.

In intraperitoneal injury of the bladder in order to avert disaster, an immediate laparotomy or cystotomy and suture of the bladder walls, with drainage. In injuries to the prostate, tampons for hemorrhage and drainage, as indicated.

In penetration of the peritoneum, with or without injury to organs, an immediate operation is indicated if the patient's condition warrants. Our whole treatment, Stiassny states, "should be directed toward the prevention of peritonitis," and this, Tillman believes, especially if organs are injured, can only be effected by prompt operation. The injuries to the intestines, mesentery, bladder, rectum, and other abdominal organs are repaired by suture, in the usual manner. Hemorrhage controlled by ligature and a careful toilette made with drainage of the peritoneal cavity. The value of treatment of peritoneal involvement after operation by prosture, proctoclysis, lavage of the stomach, opium, etc., need only be mentioned, as also operation in cases where peritonitis has already developed, closing the source of infection and providing drainage.

The use of the various serums and vaccines as prophylactic or curative, may in some cases be of great assistance. The sequel of these injuries, such as urinary, rectal or fecal fistulas, incrustation stones, traumatic stricture, etc., are dealt with in accordance with the surgical rules governing the treatment of these serious afflictions. In removing the pale great care must be exercised, as at times this act has been responsible for severe injury to organs, especially if the foreign body is a hay hook with a harpoon point (Bircher) or an irregular branch (Gant). The formation of subcutaneous emphysema about the wound has not special significance, and is an unfrequent occurrence.

## Prognosis.

The prognosis of impaling injuries depends upon the grade of injury. In those falling under Stiassny's definition the gravity of

the injury is directly proportional to the height of the fall, the body weight and the character of the impaling instrument. In those in which the pale is active, the injury is commensurate with the force of the impact, the condition of the soft parts at the time of impact and also the character of the pale. Other factors which necessarily have a bearing on the prognosis are the age of the patient, his resistance, the amount of septic material introduced, retention of foreign body and the treatment.

The statistics of Tillmann, based on one hundred forty-three (143) cases, are as follows:

Total number of cases, 143.

Recoveries, 105.

Deaths, 38.

Mortality, 26.05 per cent.

57 extraperitoneal impalements without injury to organs; 4 deaths, mortality 7.01 per cent.

29 extraperitoneal impalements with injury to organs; no deaths.

19 intraperitoneal impalements without injury to organs; 6 deaths; mortality 31.66 per cent.

34 intraperitoneal impalements with injury to organs; 26 deaths; mortality 76.47 per cent.

I have collected thirty-six (36) cases. These, added to the cases cited by Tillmann, make a total of one hundred seventy-nine (179). The mortality based on this number of cases is as follows:

Total number of cases, 179.

Deaths, 48.

Mortality, 26.81 per cent.

69 extraperitoneal impalements without injury to organs; 5 deaths; mortality 7.02 per cent.

36 extraperitoneal impalements with injury to organs; 3 deaths; mortality 8.02 per cent.

28 intraperitoneal impalements without injury to organs; 7 deaths; mortality 25 per cent.

42 intraperitoneal impalements with injury to organs; 33 deaths; mortality 78.57 per cent.

In the great majority of the cases, the cause of death is peritonitis, although it may be due to sepsis, chronic suppuration, shock, hemorrhage, exhaustion. In looking over the histories of the appended one hundred seventy-nine cases, one is struck by the fact that in penetrations of the peritoneum, without injury to organs, there were frequent recoveries without operation. Thus, in the cases of

Teichmann, Schneider, Jaures, Rufus, Holt, Thormoten, Woodbury and Ochsner, recovery followed without any special operative treatment. The explanation of this lies probably in the well known fact that the peritoneum will take care of a limited amount of septic material, and in these cases probably the amount of infective material introduced was small. The appalling mortality in penetrations of the peritoneum with injury to organs can be partially explained by the fact that the accident occurs frequently in rural districts and operative treatment is frequently delayed or done under adverse conditions. The mortality in this grade of injuries should not be very much greater than in other perforating injuries of the abdomen, if operation is done immediately.

EXTRAPERITONEAL IMPALEMENTS WITHOUT INJURY TO ORGANS.

Cases cited in H. Tillman, 1905, to which have been added thirty-six cases collected by C. J. Habhegger.

Case 1. Cotton reports a case of impalemeut on a broom handle, the handle passed through the scrotum, between the testicles, then upward along the anterior and outer pelvic wall into the abdominal wall to about three inches above the navel. Wound extraperitoneal. Recovery in five weeks.

Case 2. Hott (l. c.) Penetration of pitchfork handle extraperitoneally from the left half of the scrotum to the cartilage of the seventh or eighth rib (right); healing after the external spontaneous rupture of abscesses of the abdominal wall and the extrusion of a piece of straw.

Case 3, 4, 5. Neumann (l. c.) reports three extraperitoneal impalements of the scrotal region in a 3, 8 and 10-year-old boy, respectively, the first falling on a quill sticking upright in the floor; the second on the stem of a flowering plant, and the third penetrated by a stick. All three cases recovered. In the case of the 10-year-old boy, the stick of wood entered the right side of the scrotum and was forced upward along the outer anterior region of the pubis, between the muscles and skin of the abdomen up to the right costal arch in the axillary line, in which location, pieces of cloth and scrotal skin were found and removed. Recovery.

Case 6. Rey (l. c.) described a case occurring in a 22-year-old girl, who slid down the side of a hay cock onto the rounded end of a wooden rake, which injured the walls of the vagina and penetrated to such an extent that the teeth of the rake caught over the sacrum. By manipulation, that is twisting, she was able to release it without doing further damage—very slight hemorrhage. Healing of wound in fourteen days.

Case 7. Columbal (l. c.) described a case occurring in a young girl, where the tines of a pitchfork injured the posterior vaginal wall, with recovery.

Case 8. Zwarfel reports a case of impalement by falling on a branch, which penetrated the vagina and perineum. and perforated the recto vaginal septum. Kolpo-episio-perineorraphy. Complete healing with continence.

Cases 9-12. Similar cases are described by Körte (l. c.) and Kaldenbach (l. c.), which healed after perineorraphy. A similar case of Valk (l. c.) healed without operative interference.

Case 13. Bram (l. c.) and Stiassny (l. c.) describe a case of impalement, causing a complete tear of the perineum and injuring the rectum, occurring in a 17-year-old girl in falling on grapevine support. Recovery, with recto vaginal fistula, which was later healed by an operation.

Case 14. Reported by Enzler (l. c.), in which a man 28 years of age fell on a dry branch, which penetrated a distance of about one inch aside of the anal canal. The wound healed kindly, but death occurred later from pyaemia. At the post mortem a pelvic abscess was found, which had been overlooked and which reached as high as the kidneys and in the necrotic connective tissue about the rectum a splinter of wood 1½ inches in length.

Cases 15, 16, 17 and 18. Neuman (l. c.) described cases of extraperitoneal impalements of the perineum with penetration of the ischio-rectal fossa, of which three recovered, and the fourth, a laborer, age 34, impaled on a stick of wood as thick as his arm, died. The large wound caused by this injury reached upward about 50 c. m. from the side of the uninjured anus to the left of the spinal column. At the end of the wound were found fragments of cloth, which were removed. Exitus lethalis without apparent peritonitis. Post mortem was not permitted.

Cases 19, 20, 21, 22, 23, 24 and 25. Stiassny (l. c.) mentions a number of cases of pelvic impalement with injury to the perineum, with or without injury to the rectum, upon a pitchfork handle. Winnedge (l. c.), Taylor (l. c.), and Bryant (l. c.), upon a brush handle; V. Vamossy, upon a pole; Ambert, upon a piece of wood; Doser (l. c.), in which healing took place without any operative procedure. He also mentions a case in which a glass was forcibly pushed into the vagina, Nickel (l. c.), and one in which the same article was pushed into the rectum, in a man weighing 225 pounds, who died, probably of internal hemorrhage.

Case 26. Janssen (l. c.).

Case 27. Of especial interest is the following case, which luckily recovered, reported by Walther: A farm hand, defecating in a sitting posture, unsupported, slipped and was impaled on the root of a tree, one inch wide and one-half inch thick, which penetrated the rectum and then broke off. The next day the patient rode, but had a great deal of pain. Not until the fifth day was any attempt made to remove the foreign body, which could now barely be felt with the finger and which caused severe vesical and rectal tenesmus. It was extricated by means of a sort of obstetrical forcep by a physician. Two days after the extraction the patient was able to pass stool, and after a few days of bloody purulent secretion, the injured rectum healed completely.

Cases 28-39. The cases of Audre (l. c.), Carney (l. c.), Towley (l. c.), Schülein (l. c.), Steinberger (l. c.), Körtele, concerned impalements of the anus, with injury to the rectum. In the cases of Forwood (l. c.), Draper (l. c.), Arnott (l. c.), Black (l. c.), Braun (l. c.), the rectum was injured, the penetration taking place through the gluteal or perineal region or the buttocks. All these cases recovered, some without operation, with or without

the formation of abscesses, and others, after the parts had been sutured or a subsequent fistula had been operated upon.

Cases 40-43. In the cases of Byron (l. c.), Bush (l. c.), Smith (l. c.), and Thomann (l. c.), the recto-vaginal septum was torn by falling on a pitchfork, an umbrella point, and a picket fence. All these cases healed; in part spontaneous, without operation.

Case 44. In the surgical clinic of Czerny, the following impaling injuries of the recto-vaginal wall were observed: Jahresbericht in de Beitragen zu Klin. Chirugie Band XXIV supplement S177. A woman while at work fell on a stake, which penetrated the rectum from a point 2 c. m. above the anus and emerged between the labia. Complete tear of the perineum from the post commissure almost into the rectum. Healing with the formation of a recto-vaginal fistula. The fistula, subsequently cured by splitting the perineum and a plastic operation using wing flaps.

Case 45. In the Jahresberichte in die Heidelberger Clinic for 1898 (S. Beitragen Zu Klin. Chir. Band XXVI, supplement heft 180), is the notes of case in which a girl 18 years old fell on a nail which penetrated the perineum, between the anus and vagina, and which healed with some inflammatory reaction under moist dressings.

Case 46. Stiassny relates of a case (Surgical Clinic of Czerny) of impaling injury of the rectum, cured by a sphincter plastic operation, Aug. 20, 1897. The patient, age 54, fell from a ladder onto a sharp stake, which penetrated the rectum a distance of 10 c. m. There was a good deal of hemorrhage and the wound was sutured. After fourteen days, peritonitis, with retention of urine and incontinence of feces set in. Because of the persistence of the latter, Czerny, on the 8th of February, 1900, did a plastic operation, restoring the sphincter after releasing the rectum from the scar tissue. Recovery with restoration of function.

Case 47. An analogous case (Heidelberg Clinic) is reported by Stiassny. A man, age 34, who for two years had incontinence of feces in consequence of a rectal impalement on a piece of wood, producing severe laceration of the sphincters and great deformity due to scar. He refused operation.

Case 48. Lee reports the two following cases of extraperitoneal impalements, which occurred in the Surgical Clinic at Wurzburg: A 17-year-old boy fell from a tree onto a sharp stake which penetrated the scrotum near the left testicle and then was forced upward into the belly walls up to costal arch in the mamillary line. One hour after the injury the entire wound was laid open and the peritoneum found intact and nowhere exposed. The wound was cleansed of blood and all foreign bodies, splinters and cloths, removed and then packed. Three days afterward, secondary suture of the wound, which healed without any inflammatory reaction.

Case 49. In the third case reported by Lee, the patient, age 27, carpenter, was impaled on the handle of shovel, producing identical injuries. In this case also, the entire wound was opened, foreign bodies, splinters and scrotal tissue removed. Cleansing, tamponade, and after two days, secondary suture. Recovery.

Case 50. Lee reports an impalement of the vagina in a woman, age 25, who fell on the stem of a tobacco plant, without injury to the abdominal organs. Healed in five to six weeks.

Case 51. Lee reports further in (Med. Annals, Vol. 2, No. 10, pg. 130), without giving the author, a case of healed experitoneal impaling injury of the vagina with laceration of the external genitals in a woman, age 30, who fell upon a stake. The profuse hemorrhage was stopped by a tampon. The stake penetrated 10 c. m. into the vagina and then 15 c. m. further toward the abdominal cavity. Therapy. opium, tonics, diet. Entirely healed in four weeks.

Cases 52-54. Lee reports three more cases of probable extraperitoneal impalements of the scrotum, rectum and perineum, with penetration to within 4 c. m. of the navel, which recovered without any special operative interference.

Case 55. Hafner (l. c.) reports a case of a man impaled on the handle of a pitchfork in sliding down a hay stack. The handle penetrated the left side of the scrotum and then upward over the left iliac bone into the abdominal wall. Infection and pus formation and after an abscess of the abdominal walls, containing two fragments of cloth and pubic hair was incised and evacuated. Healing.

Case 56. Neuman reports a case of impalement, which resulted fatally. A girl, age 15, fell from the second story of a building onto an iron fence in such a manner as to be impaled on two pickets. It took a machinist three-quarters of an hour to release her from her painful position, and on examination it was found that the pickets had entered the buttocks just one side of tuber ischii, penetrated the left hip joint and grooved the left acetabulum, and on the right side penetrated the acetabulum near the crista. The abdominal muscles were undermined, but the peritoneum not opened. shortly after the injury pyaemic symptoms set in and the case terminated fatally in the course of five months.

Case 57. Albogen. A miner, age 25, in measuring the depth of a well, fell into it from a height of 6 m. onto a measuring rod, which penetrated his pelvis near the rectum for a distance of 28 c. m. and remained in that situation. In this impaled condition he was rescued. An examination of the injury, after freely opening the whole parasacral wound, revealed the fact that it was extraperitoneal and had not injured the pelvic organs. The penetrating wound lay between the rectum and the sacrum. The rectum had a tear 10 c. m. in length, involving the muscular and serous coats, but not the mucous membrane. Between the first and second foramina the sacrum had been pierced with splintering of the bone. The peritoneum was not injured. Treatment: Removal of bone splinters, fragments of cloth and splinters of wood; suture of the rectum; tamponade with partial closure of the external wound. Injecture of 20 c. c. antitetanic serum. On the seventh day the patient had a tetanic convulsion and was again injected, this time with 20 c. c. of serum. Healing without any more convulsions.

## EXTRAPERITONEAL IMPALEMENTS WITH INJURY TO ORGANS.

Case 59. In an analogous case, reported by Bigham (l. c.), the patient also discharged a fragment of trousers per urethram.

Case 60. Observation of Schloathe (l. c.). A soldier fell from a tree onto a sharp palisade and remained impaled one-quarter of an hour. He

was brought to the hospital still impaled, having been released by sawing the palisade, where it was removed. The palisade, which was as thick as a man's arm, had been driven through the perineum and had penetrated the bladder and could be felt near the last rib. Profuse inflammation and suppuration of leg, scrotum and "abdomen" followed. Numerous abscesses, containing fragments of wood were incised during the course of two years. On several occasions pieces of bark were discharged per urethram, after which, the patient felt well. Later, bladder stone symptoms, due, probably, to an incrusted foreign body in the bladder.

Cases 61 to 77 of Bucking (l. c.), Muralt, Meckel, Neumann, Hapemann, Muhlberger, Schutte, Brigham, Hewitt, Gibbs, Bryant, Hapner, Beach, Zimmermann, Adams, Fleury and Cuylets. In these seventeen cases the impalements were extraperitoneal with injury of the bladder, with or without injury to the rectum and vagina. All these cases recovered, some without any operative treatment.

Cases 78 to 80. In a case of Jobert de Lamball (case 78), an incrusted lead pencil had to be removed from the bladder by operation, and in case of Leroy d'Etolles and Camper (l. c.), cases 79 and 80, a stone had formed in the bladder, due to splinters of wood which had penetrated it. All these cases recovered.

Case 81. vonEsmarch reports a case occurring during an attack on the fortification of Doppel. A Prussian soldier fell into a pitfall and was impaled, producing the following injuries: Penetration of the perineum with tearing of the bladder and rectum. Healing of the large wound under careful nursing in three months. At first the incontinence of urine disappeared, and later the incontinence of feces.

Case 82. VonMyles (l. c.). A drunken man fell with his buttocks on an overturned chair, the leg of which penetrated his rectum. In this position he lay until the next morning. On the third day after the injury he was taken to the hospital, when on examination with a sound it was found that the five to six-inch wide wound could be followed in an upward direction and that the rectal wall had been torn about an inch above the anal orifice, the later finding being verified by a digital examination. The bladder was distended. Laparotomy was made because of suspected peritonitis. In the abdominal cavity was found a bloody serous fluid, but no perforation of the peritoneum. Suture of the abdomen with drainage in region of rectum. In the healing a recto-vesical fistula formed, which eventually closed.

Case 83. Rubattell and Mueller (l. c.). A working man fell from a wall upon a sharp pale, which pierced the anus, then tore through the anterior wall and penetrated the bladder and then further extraperitoneally appearing under the skin of the abdomen between the navel and the anterior superior spine of the ilium. The patient had the energy to remove the pale immediately, which was covered with the blood for 30 c. m. of its length, showing the distance it had penetrated the body. In spite of these injuries there were untoward symptoms. With expectant treatment (rest, opium) the bladder began to functionate normally in three weeks, and complete healing took place in four weeks. At the point where the pale appeared under the skin of the abdomen an abscess developed, which was incised and also healed in the above stated time.

Case 84. Schultz (l. c.), reports a case observed by Rudmeyer of an impalement on the handle of a hoe, with injury to the perineum, rectum and bladder. In spite of the severe injury, healing took place without any disturbance of functions.

Case 85. Holmes (l. c.) reports a case of impalement of a pregnant woman on a pitchfork, the uterus being injured superficially, as abortion did not take place. Recovery.

Case 86. Braun (l. c.) and Stiassny (l. c.) report a case of impalement occurring in a woman, age 35, with injury to the vulva and urethra. The accident occurred in consequence of a rail breaking as the woman was climbing over a fence. There was an enormous hemorrhage, and on examination it was found that the urethra had been separated from symphysis and the corpus cavernosa clitoridis had been torn across. Suture, permanent catheter for two days. Healing in five days.

Case 58. Reported by Perrin. A drunken locksmith, age 50, fell on the leg of an overturned chair, which penetrated the bladder through the rectum. A discharge of feces and urine through the wound. The wound healed in the course of two months. Following this there was at times retention of urine, which disappeared after the spontaneous discharge of a piece of cloth per urethram.

Deetz, Edward; boy, age, 13, sitting on the iron head of a hammer, which slipped down and the handle entered the rectum for a distance of 5-6 c. m. Following the injury, vomiting, but no blood in urine. Twenty hours after injury, pulse 116, temperature 39.6, respiration normal. The lower abdomen quite tender, the rectus somewhat rigid. Some tenderness over the liver. No distension. On the third day feces were passed with urine, causing great pain. Supra-pubic cystotomy, wound posterior wall of bladder communicating with rectum 1 c. m. broad, 1½ c. m. long. Suture of same in two tiers. Supra pubic catheter and irrigation of bladder. Recovery in twenty-five days.

Kurr Flick. Man, age 31, impaled on the leg of a chair which penetrated the gluteal fold and perforated the bladder and rectum. This wound healed with conservative treatment. In about a month symptoms of stone supra-pubic cystotomy and stone removed from bladder. Death follows operation, due to sepsis. Autopsy. Fistulous tract between perineum and urethra. Pus in back of hip joint.

John A. Sampson, Albany, N. Y., reports two cases of extraperitoneal impalement without injury to organs. The first case occurred in an adult woman, who stumbled over some toys while going downstairs and fell on an upright piece of a clock, bruising and lacerating the vulva and penetrating and injuring the vagina lateral to the urethra. The vaginal wall was injured to such extent as to open the bladder and there was considerable bleeding from the torn parts. Treatment: Suture of the vaginal wall. Recovery.

Kurr Flick. A man, age, 24, fell from a wood pile onto an upright stick of wood which penetrated the perineum a distance of 30 c. m. between the scrotum and the anus, in a direction from in front backward, injuring the pars prostatic of the urethra, perforating the bladder and the rectum.

No injury to the sphincters. Conservative treatment, cleansing, tamponade and antiseptic dressings. Recovery.

N. P. Mills (l. c.) Man, age 19, impaled by falling in a stooped position on draw-bar of freight car. The perineum was torn to the extent of about two inches, the rectum separated from the anal margin and from the surrounding tissue to an extent of about six inches and carried upward. The membranous portion of the uretha was torn across and the bladder also pushed upward with the rectum. Treatment: Anastamosis of urethra; suture of rectum to skin margin. Death from sepsis.

R. A. Sterling (l. c.). Middle-aged man fell on the handle of a pitchfork which penetrated the lower part of the rectum and then perforated the base of the bladder without opening the peritoneum. All the urine passed through rectal wound. Supra-pubic cystomy. Suture of bladder. Death in three months, due to continued suppuration of rectal wound.

Nathan Jacobson (W. B.), age 12, slid down a hill on sled, lying on his back and was impaled on the branch of a tree frozen in the snow and ice, which penetrated the rectum, perforating its anterior wall close to the prostate and was then forced forward to the pubic arch, completely severing the urethra. The anus was but little torn. The boy suffered a great shock. Treatment: Perineal section and drainage of bladder; permanent catheter. Recovery.

## INTRAPERITONEAL IMPALEMENT WITHOUT INJURY TO ORGANS.

Case 87. Teichmann (l. c.). Intraperitoneal impalement of a 13-year-old boy on the iron handle of a coal shovel, which penetrated the anus and was forced in the abdomen up to the hypochondrial region. Severe hemorrhage, with symptoms of peritonitis. Recovery in fourteen days.

Case 88. Schneider (l. c.). A girl, age 28, fell from a garden wall, a distance of 10 feet, on a strong branch, which penetrated the vagina and into the abdominal cavity. Severe hemorrhage. A piece of the branch in the abdominal cavity could not be extracted. Tamponade. Healing took place after weeks of fever and vomiting. After years, the piece of wood could still be felt in the abdomen, but the girl had no pain.

Cases 89-91. Jaures reports a case, with recovery, of an intraperitoneal impalement on a pitchfork, which pierced the vagina between the cervix and rectum and penetrated as far as the ribs.

Rufus (l. c.) Reports an intraperitoneal case of impalement, with recovery, on a pitchfork handle with rupture of the vaginal tissues, occurring in a farmer's wife, age 43, and Holt (l. c.) another of the gluteal region and ischio-rectal fossa occurring in a servant girl as the result of a fall from a second story onto a picket fence.

Cases 92-93. Madelung reports two instructive cases of intraperitoneal impaling injuries through the scrotal tissue. The first occurred in a farmer, age 24, who jumped from a barn onto a pitchfork handle and was impaled on it. The injury was immediately sutured, but on the sixth day symptoms of peritonitis developed and on the tenth day he was admitted to the clinic of Madelung. At that time a large abscess had formed in the abdominal wall, which was incised and found to contain a piece of cloth and that a muscle

wound under the left costal arch with prolapsed purulently inflamed omentum existed. Exitus lethalis twenty-four hours after admission. The autopsy showed that the wound canal extended from the scrotum into the inguinal canal and the abdominal walls to left epigastric region and that the peritoneum had been opened under the left costal arch.

Case 93. Madelung. The second analogous case. A renter fell from a ladder onto the stalk of a dahlia plant, which penetrated 28 c. m through the scrotum, the inguinal canal and belly wall to the epigastric region. At this point it had opened the peritoneum and the omentum had prolapsed. Operation forty hours after injury. Reposition of omentum, suture of peritoneum, opening of entire wound canal with curettage and packing of same. Secondary suture one week after injury. Recovery.

Cases 94-95. Jausekewitz and Nassauer each report similar cases as Madelung, with recovery.

Cases 96-100. The cases of Bacon, Gross, Throkmorten and Woodburg were severe intraperitoneal impalements through the anus and rectum. In all of these cases in spite of the severe injury and the fact that in some of them peritonitis developed, recovery took place. Especially the case of Woodburg is very remarkable. A girl, age 15, fell a distance of 8 feet on a stake four inches thick, which penetrated the anus and rectum and then up into the body a distance of 27 inches, pressing out the left chest wall and fracturing three ribs. Slight bleeding, but collapse after injury. Recovery in six weeks.

Besides the one fatally ending case of Madelung there are four more fatal cases, which are briefly reported. All these were intraperitoneal rectal impalements.

Case 101. Van Hook reports the case of boy at age 13, impaled on the handle of a pitchfork. The handle entered the rectum and was forced upward a distance of 7¾ inches as shown by coating of blood and feces. After twenty hours peritonitis developed. Immediate laparotomy. In the plica recto vesicalis of the peritoneum a tear was found four finger breadths wide. The wound in the rectum was situated about two inches above the anus. In spite of careful toilette of the abdominal cavity with suture of the peritoneum and drainage, the peritonitis spread and death took place four days after the injury.

Case 102. Gosselin and Dubar (l. c.) report a case of a woman who fell four stories onto a sharp picket fence and was impaled through the gluteal region, tearing the rectum across, penetrating the vagina and entering the peritoneum in rectovaginal fold of the peritoneum. Death due to general peritonitis.

Case 103. Heath (l. c.) A man 18 years of age fell in the sitting posture on the handle of a blacksmith's hammer which penetrated through the anus into the rectum. It was immediately withdrawn by some of his fellow-workmen. The patient then walked without any special difficulty to a hospital about one mile distant. During the night he went into collapse and died the next morning. In this case the autopsy showed that death was due to peritonitis. The peritoneum had been torn in the region of the rectovesical fold, the rectum about 3 inches above the anus and on the right side a second

opening of the peritoneum with penetration from within of the psoas muscle. In the peritoneal cavity were found pieces of cloth and small quantity of hard feces.

Case 104. Stiassny (Institute for Forensic Medicine, Vienna Protokoll, No. 468, 2 Sept., 1891, specimen 386), reports the following fatal case with infraction of os sacrum: A man, age 30, apprentice to a miller, fell from the roof of farm house onto a rose bush support or prop, which passed through the rectum and into the pelvic cavity. Death took place the next day. The autopsy revealed a purulent peritonitis. The pale had entered the body about 1½ c. m. to the outside of the anal opening, perforated the peritoneum twice and passing close to the rectum had pierced the sacrum between the second and third foramen. A separation of the first and second piece of the sacrum, which was also found was not directly due to the impalement, but probably to a change of direction of the force toward the front, the pale acting as a lever.

Case 105. Lee reports a case of a probable intraperitoneal impalement with a fatal termination in two days, in which the pale penetrated a distance of 25 c. m. into the abdominal cavity entering near the coccyx. As an autopsy was not permitted, the exact extent of injury is not given.

Dr. Edward F. Barnes, of Marlboro. The iron portion of a pitchfork, by one of the prongs of which a boy was transfixed. He was 14 years old, and was ascending a hay-mow, with the fork in his hand, when he fell; and as he slid down the mow, the fork went first and he came down upon it, the prong entering the perineum, and coming out about an inch to the left of the umbilicus. The prong had been broken and mended, and, not being very strong, it was somewhat bent at the time of the accident. The fork was at once withdrawn; and a small piece of omentum, that protruded, was returned. The boy did perfectly well; and, when the fork was sent to the museum he was a stout, healthy young man, 23 years of age (1860).

Wm. J. Gillette, Toledo, reports a farmer, age 38, in sliding from a load of hay was impaled on a pitchfork handle, penetrating a distance of about four inches, tearing the sphincters and injuring the rectal wall and opening the peritoneal cavity. At the time of injury the parts were cleansed and drainage inserted to the peritoneum. No attempt at suturing. Healing with incontinence of feces. About two months later the sphincters were successfully repaired and the patient fully recovered.

A. J. Ochsner mentions a case of pelvic impalement of a boy, age 15, who slid down the side of a stack of grain onto the handle of a pitchfork, and whom he saw about ten days after the injury. The history of the case is rather uncertain, but the handle was said to have penetrated a distance of 12 inches. The patient was suffering from cystitis and peritonitis, and the extent of the injuries could not be determined at this time. There was, however, a large tear aside of the anus, showing where the handle had penetrated, and under antiseptic dressing and abstinence of all diet, except beef juice, the boy recovered.

Reports from the clinic of W. J. and C. H. Mayo, two cases of intraperitoneal rectal impalement on the handles of pitchforks. The one occurred in a man, age 34, and the other in a man, age 23. In both of these cases there

were injuries about the anus, and the sphincters were torn, as also the anterior rectal wall. Both of these cases recovered, the first after laparotomy and abdominal drainage, with repair of sphincters, and in the second, repair of sphincters.

H. P. Richie, St. Paul, reports the following case: A man, age 20, while standing on the top step of an inclined platform being photographed in a group picture, lost his balance and fell backward and was impaled upon the barrel of a Kraag Jorgansen rifle, the cleaning rod of which went through the ischio rectal space into the free peritoneal cavity. Laparotomy twenty-four hours after injury. Pelvis was filled with blood and serum. Death from septic peritonitis.

Kimmerle, Adolph. Male, age 39, introduced a piece of wood 1¾ inches thick into rectum to gratify sexual inclination, penetrating the peritoneum. In thirty-six hours laparotomy for peritoneal involvement. General purulent peritonitis with feces found in peritoneal cavity. Toilette, drainage, Fowler position. Recovery. Cultures from the abdominal cavity showed the colon bacilli.

## ILLUSTRATIVE CASE.

### Gant—Stick in the rectum—Death from peritonitis.

"A few years since, my former pupil, Dr. Hawthorne, of Hiawatha, Kansas, presented me with a stick which he had removed from a gentleman who died from peritonitis several hours after operation. He gave me the following history of the case.

"He had been called hurriedly on the afternoon of Sept. 1, 1893, to see Mr. B., of Kansas, aged about 65. He found the patient suffering excruciating pain, caused by a large stick, which was projecting from his anus.

"The patient informed the doctor that for a number of years he had been afflicted with very annoying itching about the anus, which was increased every time the bowels moved. To obtain temporary relief he had been in the habit of taking a chip or stick and scratching himself. On this particular occasion he had selected a very knotty stick, about two inches (2.54 centimeters) in diameter and about ten inches (2.5 decimeters) in length, which had a hook about two inches (5 centimeters) from the end. With this he was enjoying the luxuries of a good scratch, when his feet slipped from under him and the stick came in contact with the ground, and was forced into the rectum for about two inches (5 centimeters). An attempt was made to withdraw it, but he was unable to do so, for the hook had caught in a fold of the mucous membrane. He endeavored to release it farther up the bowel and then withdrawing it, but it became fastened again; he made several futile attempts, the stick each time going higher up the bowel. In despair he called his wife and son, who carried him to the house and placed him in bed. His son then tried to remove the stick by force, he became frightened and Dr. Hawthorne was called in. On examination it was found that the hooked portion of the stick had caught in the posterior wall of the rectum about six inches (15 centimeters) above the anus. It was pushed upward until the point of hook was released; the sharp point was then covered by the finger and the stick withdrawn without further

difficulty. This, of course, was done under an anesthetic, as it was necessary to force the hand partly into the rectum. There was considerable bleeding and a rent was found through the peritoneum about three inches (7.5 centimeters) in length. A consultation was advised, and Dr. E. W. Baird, of Tescot, Kansas, was called. It was thought best to keep the rectum clean by antiseptic irrigations and the bowel quiet by the use of large doses of morphine, and to allow nature a chance to heal up the rent. The patient continued to grow worse. The temperature was high, the pain increased in severity and the abdomen rapidly distended with gas until it was almost as tense as a drumhead. He became unconscious, and thirty-six hours from the time the stick was forced into the rectum he died from peritonitis.

"This case is another example where a life was sacrificed by the laity trying to avoid payment of a surgeon's fees. Had Dr. Hawthorne been called when the accident first occurred there is not much question but what the stick could have been removed without serious injury to the bowel."

R. A. Sterling, Melbourne, Austria. A young man playing cricket fell in jumping over a fence to get the ball, onto a wicket, which penetrated the rectum almost four inches from the anus and opened the peritoneal cavity. Great collapse and distention, signs of a developing peritonitis. No operation. Recovery in six weeks. Twenty years after, patient was well, except for a slight loss of control of sphincters at times.

Dr. J. Kaston Horshy reports a case of intraperitoneal impalement without injury to organs. Mr. H. T., age about eighteen, unmarried, referred to by Dr. M. P. Rucker. The patient had been perfectly healthy and a strong, robust young man. On the 12th day of July, 1908, he was jumping with some companions. They leaned a broom against a chair with the straws of the broom up. In attempting to make a rather high jump his feet touched the broom and the chair fell over, turning the broom with handle up. The handle struck squarely on the anus and went in about two feet. It was pulled out with difficulty. Dr. Horshy saw him on the night of July 12th, and found the abdomen very hard, and operated at once and found that the rectum was perforated about on the level with the promontory of the sacrum. There was a small amount of free fluid in the pelvis and the surrounding intestines were much congested as in a beginning peritonitis. He did not wish to use the Trendelenburg position for fear of spreading the sepsis. Under the circumstances, closing the rupture was quite difficult, but a few sutures of chromic cat-gut were inserted and a drainage tube with two pieces of gauze was carried down to the wound in the rectum. The patient was put to bed with the head of the bed elevated. He made a very satisfactory recovery, though his temperature on July 13th reached 103. His pulse ranged from 100 to 110. On July 16th his temperature ranged from 98 to 99.6 and pulse from 60 to 68. The patient developed a fecal fistula, which closed without operation. Otherwise he made a satisfactory recovery and was discharged from the hospital on August 19, 1908.

There was no evidence of other injury by the broom handle, except a relaxation of the anus and slight laceration at this point, as though the sphincter had been dilated.

Eugene Bircher—Kant. Kraken anstalt zu Aarau. A boy, age 14, while

playing in a hay loft, slid down a cock of hay onto a hay hook, an instrument with a harpoon hook, which penetrated the left of the anus and whose point could be felt under the abdominal wall near the region of the umbilicus. Chloroform anesthesia. The hook was removed through the laparotomy wound after sawing the part of it which projected from wound near anus. The bowel was not injured. Suture of abdominal wall. Bandage, ice and opium, cleansing of penetrating wound and drainage. Feces had escaped in the free abdominal cavity. The hay hook was removed through the abdominal wound. Suture of bladder and bowel. Toilette of peritoneum. Drainage through peritoneal wound. Suture of abdominal wound. Recovery.

Dean Lewis (l. c.) A boy, age 9, while defecating in a cornfield, became over balanced and was impaled on a sharp cornstalk. The depth to which this pale penetrated the rectum could not be ascertained, but there were no external visible signs of injury. The rectal wall was penetrated in the region of its peritoneal reflection and the bladder wall also in the region of its peritoneal reflection. Laparotomy was performed for developing peritonitis. The rectal wound was carefully sutured. The bladder wound could not be found. Drainage of the Cul de Sac. Death from general suppurative peritonitis.

Kurr Flick—Biet. ze Klin. Chir., 1900. A boy, age 10, fell from a tree onto a wooden picket fence; one of the pickets of which penetrated to the right of the anus a distance of 5 c m. and perforated the peritoneum. The symptoms complained of were pain and distention. Treatment: Cleansing, ice bag on abdomen and opium. Recovery.

Of intraperitoneal impalements, with injuries, either of pelvic or abdominal organs, there were 34 cases, 8 recoveries and 26 deaths.

Case 106. Bourgine LeLanany (l. c.) reports the case of a man in the preantiseptic era, 1873, who fell from a great height, striking a stake with the right side of his body near the pubic region, which impaled him. There was prolapse of the omentum, of the ileum and the torn colon. The colon was torn to the extent of five inches and a large amount of feces escaped into the abdominal cavity. Treatment: Cleansing of the abdomen, suture and reposition of the bowel and omentum and suture of abdominal wall. Recovery in three months.

Case 107. Colombat reports a recovery of a probable intraperitoneal impalement in a girl, age 17, with injury to the vaginal tissues and the bladder. The treatment consisted in the introduction of a permanent catheter and strict diet.

Case 108. Boesuk reports the following remarkable case: A farm renter fell from a hay loft on a sharp pole which pierced the skin a little to the left of the anus and then perforated the rectum, the S romanum of the colon and the bladder. The injured person was transported to Warsaw, being en route forty-five hours. At the hospital an intraperitoneal rupture of the bladder was diagnosticated and laparotomy performed. The point of the pole, 8 c. m. in length, which had broken off, was extracted from the pelvic colon and the escaped feces in Douglas Cul de Sac removed. Suture

of the bladder, resection and suture of the S romanum. Toilette of peritoneum. Mickulitz drain of iodoform gauze, permanent catheter, morphine. Recovery in four weeks.

Case 109. Laussig reports a case of intraperitoneal impalement, which recovered without any special operative procedure. A boy, age 15, fell from a ladder on a rake handle which perforated the rectum and peritoneum and penetrated as far as the anterior belly wall. Taussig extracted the 30 c. m. long stick of wood and treated the patient expectantly with antiseptic flushing of wound, rest, obstipation. On the ninth day an abscess of the anterior belly wall was incised and found to contain blood, pus and pieces of cloth. Rapid recovery.

Case 110. Alsberg treated a case of extra and intraperitoneal impalement of the bladder by laparotomy and bladder suture in a boy, age 9, who slipped and fell in the sitting posture, on an iron picket fence. The somewhat blunt point of the picket pierced the inner side of the thigh about 10 c. m. below the gluteal fold and was then forced upward, penetrating the horizontal ramus of the os pubis and perforated the anterior and posterior bladder wall near the fundus, making both an extra and intra peritoneal wound of that organ. Laparotomy twenty-five hours after the injury. In the peritoneal cavity was found a large quantity of turbid urine and fibrin. Suture of the intraperitoneal bladder wound. Iodoform gauze and tubular drainage of abdomen. Suture of the laparotomy wound. The extra peritoneal bladder wound was then exposed by an incision over Poupart's ligament and packed. Drainage and permanent catheter inserted into bladder. Recovery.

Case 111. Steinthal reports the following case of extra and intraperitoneal rupture of the bladder, which terminated in recovery: A young woman slid from a hay stack onto a pitchfork, the handle of which penetrated the vaginal wall, perforating the bladder, both intra and extraperitoneally. vagina without causing any external laceration and pierced the anterior Laparotomy with suture of the bladder wall. Recovery.

Case 112. Lambotte reports a case of rectal impalement of a man, age 22, on the iron pole of a hand wagon. Four hours after the injury, symptoms of peritonitis appeared. On examination with a sound a tear was found in the rectum about 8 c. m. from the anus through which the sound passed into the peritoneal cavity. Laparotomy. In the abdominal cavity were found feces and bloody serous fluid. In the S Romanum two wounds were found which were closed by suture. Suture of the rectal wound under the floor of pouch of Douglas in three tiers. Cleaning of the abdominal cavity and flushing with hot water. Two drains inserted in the lower angle of the wound. Recovery.

Case 113. Munford observed a case of impalement on a pitchfork in a boy, age 15. The tines of the fork had penetrated the left inguinal region and in this region had made a wound ¾ inches in length, through which about three feet of small intestine which had been perforated in places prolapsed. The escape of feces took place only outside of the abdominal cavity. Cleansing, suture and reposition of bowel, suture of abdominal wall. Recovery in three weeks.

To these eight cases of intraperitoneal impalement, with injury to the organs of the pelvis, which recovered, are added twenty-six fatally terminating cases of the same character. These cases of intraperitoneal impalement collected in part by Stiassny and in part by Tillman, with injury to the rectum, the bowel, the vagina and the bladder, terminated fatally chiefly in consequence of peritonitis. Death ensued in some a few hours after the injury; in the majority, however, one or two days after it and in a few only, after a number of days, eight, ten, twenty-nine days.

Cases 114-136. Case 114, Gillispie. Intraperitoneal impaling injury of the rectum, occurring in a negro, age 30, by falling on a pitchfork handle; 115 Esmark. Intraperitoneal impalement of the rectum on a flower stalk in a boy.

No. 116, Burnier. Intraperitoneal impaling, injury of the anus, occurring in a boy, age 17, caused by falling on iron rod.

No. 117, Fischer. Penetration of the anus, rectum and bladder by a broom handle.

No. 118, Hewitt. Penetration by a blacksmith's tongs of anus, rectum and bladder in a man, age 43.

No. 119, Stokes. Penetration of the anus, rectum and bladder by the leg of a chair, in a boy, age 16.

No. 120, Gaffney. Intraperitoneal impaling injury of the rectum and bladder occurring in a farmer.

No. 121, Andrew & Smith. Intraperitoneal impaling injury through the anus perforating the rectum and bladder in a boy, age 14, caused by a fall backwards on the end of a pair of tongs.

No. 122, Poncet. Intraperitoneal impalement of the rectum and bladder in a young man, caused by a fall on a picket fence.

No. 123, Jobert LaLamball. Intraperitoneal impaling with injury of the bowel in a woman, caused by a fall from a fifth story onto an iron rod.

No. 124, Quenn. Intraperitoneal impaling injury, caused by fall on iron rod. Death in two hours. Character of accident not given in detail. More exact description, British Medical Journal, No. 25, 1882.

No. 125, Kurella Schaum. Impaling injury of a woman on a cane, which penetrated the rectum and was forced into the peritoneal cavity. While dancing the woman was lifted and fell on cane.

No. 126, Watson. Intraperitoneal impaling injuries of the anus, rectum, mesentery and ileum. Death from purulent peritonitis twenty-nine days after injury.

No. 127, Jeaffreason. Intraperitoneal injury of a girl, age 15, by falling on stick which had been placed, into the anus and rectum.

No. 128, Martin de Pedro. Intraperitoneal impalement of rectum by falling on a broom handle in a 14-year-old boy.

No. 129, Haecker. Intraperitoneal injury of the rectum 45 c. m. in depth by the handle of a pitchfork in a farmer, age 45.

No. 130, Naumann. Intraperitoneal injury of the rectum and small intestine by a window cleaner, age 28, by falling on the back of a chair. In the abdominal cavity were found a lock of hair, two freshly broken screws and a piece of cloth.

No. 131, Bollet. Intraperitoneal injury of the anus and rectum in a man, age 20, by falling on a sharp iron rod.

No. 132, Pollton. Injury of rectum, jejunum and liver in a man, age 18, caused by falling on a broom handle.

No. 133, Fischer. A soldier, age 21, fell on a vine support which broke off in the rectum, as shown by the autopsy, and stuck fast in the first foramen of sacrum.

No. 134. Willard. Perforation of the rectum, the bladder and the bowel in three places in a man, age 30.

No. 135, Gott. Intraperitoneal impalement of a boy, age 12, on a pitchfork handle with injury to the bowel.

No. 136, from the Clinic of Czerny, reported by Stiassny. A man, 81 years of age, fell from a ladder on a broken round, which fractured the sacrum and injured the perineum, making a wound 3½ c. m. long, 7 c. m. front of the anal opening through which a loop of intestine 130 c. m. in length, presenting a tear which permits the escape of feces, prolapsed. Suture with cleansing and reposition of the prolapsed bowel. Suture of skin. Drainage, antiseptic dressing, opium. Death with symptoms of increasing collapse the next day. The autopsy revealed peritonitis. The peritoneum was opened to the left of the rectum in the pouch of Douglas and the sacrum, the seat of a comminuted fracture at its fourth vertebra.

Case 137. McRae reports an impalement of a girl 22 years, on the handle of a pitchfork, who fell on it in descending from a haystack. The handle penetrated through the vagina into the cavity of the abdomen, and could with difficulty be extracted. Death due to peritonitis on the ninth day. The autopsy showed a perforation of the recto-vaginal septum, and still higher in rectum a second perforation and here the handle had penetrated the peritoneal cavity to the region of transverse colon.

Case 138. Reported by Lee, a case of Easter. A man, age 18, in jumping from a window fell on a perpendicular pole which pierced between the scrotum and thigh into the peritoneal cavity. Death on the third day, due to peritonitis. No laparotomy. The small bowel was penetrated about thirty times.

Case 139. Maynard (l. c.). Impaling injury of a girl, age 11, who fell from a hay cock onto a sickle, which injured the vagina, bladder and the bowel. Treatment: Extraction of the sickle, antiseptic dressing. Death took place after twelve weeks, due to catarrh of the bowels. Fistulous communication between vagina, bladder and bowel.

Dr. A. Hitchcock, Fitchburg. A boy about 10 years of age, slid from a hay-mow with his thighs bent upon his body, and the hook entering the back part of the thigh midway, passed through the muscles, under Poupart's ligament, through the ileum, behind the liver, through the diaphragm, behind the lung, and between the seventh and eighth ribs. The barb, however, caught on the eighth rib, and the point did not penetrate the skin. The boy died in three and a half hours; and there was found a hemorrhage into the peritoneal cavity from a wound in one of the ext. iliac veins. The case occurred in the practice of Dr. Godding, of Winchendon; and the hook, which was removed after death, was sent by Dr. H., who assisted in the examination.

A. T. Bristow reports a lethal case of intraperitoneal impalement of the pelvis, without injury to organs, which occurred in his practice in 1901.

A conductor, standing on the running-board of an open car and looking in the opposite direction to which the car was going, was struck by the shaft of a grocer's wagon, standing on the curb. The shaft penetrated the perineum, injuring but not exactly impaling the rectum. It then passed up and into the pelvis, fracturing the os pubis and tore the bladder entirely away from its attachments, shoving it up into the abdominal cavity still adherent to its ureters. A perineal section failed to find the bladder, and accordingly an incision into the abdomen was made, and not finding the bladder in its usual place in the pelvis, discovered the remarkable condition indicated. The bladder, which was full of urine, was then opened, whereupon the man ceased to breathe, although he was only under nitrous oxide anaesthesia. The external wound was remarkably slight and gave no indication of the extensive nature of this man's injuries.

Kurr Flick. Bietrage zu Klin. Chir., 1900. Man, age 41, fell a distance of three meters from a hay stack and was impalled on the handle of a pitchfork. The handle penetrated the rectum, perforating it in two places, and was then forced up into the peritoneal cavity through the pouch of Douglas, perforated the root of the mesosigmoid and then penetrated retro-peritoneally to the second lumbar vertebra. Immediate laparotomy, drainage. Death due to general peritonitis on the sixth day. Autopsy showed a retroperi-hole in the mesosigmoid. The psoas muscle was torn from its attachments to the transverse process of the spine.

Eugene Bircher. A workman fell into a quarry onto a stone drill toneal abscess, which communicated with the peritoneal cavity through the 4 c. m. in breadth, which penetrated the perineum anterior to the rectum and was forced a distance of 20 c. m. into the abdominal cavity. It was immediately removed by fellow-workmen. The wound caused by the drill was about 3 c. m. long in front of the anus, and a little to the left of the middle line. Treatment: Disinfection of wound. Xeroform dressing, rest in bed, fluid diet, ice bag opium. Death on the ninth day, due to peritonitis. The autopsy showed that the rectum had been perforated in the upper end of the ampulla and the peritoneum in the recto-vesical pouch.

Dr. H. A. Sifton mentions a probable case of intraperitoneal impalement, with injury to organs, which terminated fatally three hours after injury. A boy, age 15, slid from a hay stack onto a fork handle, the handle entering the rectum without producing any external evidence of injury. Death took place three hours after injury, probably from hemorrhage.

W. J. and C. H. Mayo. A case of intraperitoneal impalement with injury to the bladder treated in the clinic of W. J. and C. H. Mayo, which resulted fatally. The patient, a well driller, age 19, dropped into a well in consequence of a rope breaking and was impaled on the handle of a stone pick, which ruptured the perineum and tore the anterior wall of the rectum and penetrated the bladder and peritoneum. Laparotomy. Death due to hemorrhage from rupture of internal iliac vein.

H. V. Stone (l. c.) reports a case in the service of Dr. Bloodgood. A boy, age 10, fell into an excavation, landing on an iron pipe, which pene-

trated the rectum a distance of 7 c. m., at which point it perforated the rectal wall and entered the peritoneal cavity and perforated the ileum about 25 c. m. from the ileo caecal valve. The patient began to complain of pain a few hours after the injury and vomiting set in one hour after injury. He was admitted to the hospital about fifteen hours after injury, no stool or urine having passed since that time. Slight contusion about the anal region. Laparotomy, anastomosis about the injured ileum, which was part outside of abdominal cavity, close of peritoneum over hole in rectum. Drainage. Death due to general peritonitis.

Eugene Bircher reports a second case of impalement on a hay hook. A boy, age 12, slid down a haystack onto a hay hook which entered somewhat lateral to the peritoneum and whose point could be felt under the abdominal wall. Immediate laparotomy after sawing off the end projecting from the anus. The hay hook had perforated the bladder in two places, its posterior wall and fundus and then penetrated the intestine a number of times. Removal of foreign body, suture of bladder and intestine, toilette of the peritoneum, dependent drainage; death in thirty-six hours. Damage had been done by attempts to remove the hay hook.

The last form of impaling injury, of which there are four to report, are those cases of total impalement in which the impaling instrument entered in the region of the pelvis and penetrated the body and appears again in the axiliary region, in the thorax, etc., making a wound of entrance and exit.

Of total impalement there are four observations by von Roach, Hutchinson, Sargent and Zodak Howe. Recovery took place in the case of Zodak Howe, which was in all probabilities an extraperitoneal impalement, without injury to any organ. The two cases of Roch and Hutchinson died. The patient of Sargent died twenty years after the injury in consequence of it.

Case 140. Roch, July 25, 1625. A servant fell from a hay stack onto a hay rake, which was standing against it. The handle of the rake penetrated the body and came out again in the neighborhood of the axilla. The handle broke in three pieces, the middle piece remaining in the abdomen. On the third day death took place with indescribable pain.

Case 141. Hutchinson (l. c.). A woman, age 27, slipped on stairway and fell on a broom, the handle of which penetrated the skin near the rectum, and was driven upward into the body and came out again through the thorax. Self-extraction. No severe hemorrhage. Death in twenty-four hours. Autopsy. Two perforations of the rectum, perforation of gall bladder, liver and diaphragm and penetration of right lung, causing hemo-pneumothorax.

Case 142. Sargent. A woman, age 36, fell from a hay stack on a pitchfork handle, which penetrated the abdomen through the vagina and came out through the thorax. Fracture of the left lower ribs. Since the injury the patient had constant pain in the sternal region and in the left hypochondriac regions so that finally she could not lie. Exitus lethalis twenty

years after injury. Autopsy. A hernia of the left side of diaphragm. In the left plural cavity, the stomach, transverse colon and a few centimeters of the descending colon had prolapsed and compressed the lung to a hand's breadth. In the left half of the diaphragm was an opening 4 c. m. in diameter. The heart was pushed to the right side of the sternum. In the peritoneum of Douglas pouch was an irregular scar.

Case 143, observed by Zodak Howe. Total impalement of a boy, age 15, on the wooden handle of sickle, which penetrated through the perineum into the abdomen and then came out two inches from the navel. After sawing the handle across and enlarging the abdominal wound it was possible to extract the piece of wood, which was 14 inches long. Complete recovery in three weeks. This was, perhaps, an extraperitoneal total impalement, without organ injury.

Borrough Cosens reports a case of multiple impalements. W. P., age 12, fell from a tree, a distance of six feet onto some spiked railing and hung suspended on these. When brought to the hospital he was suffering from severe shock and had the following wounds:

(1) A perforating wound of abdomen in the left iliac region, about ¾-inch in length, from which some intestine and omentum protruded.

(2) A wound 1 inch in length at the lower margin of the eighth left rib, involving the skin and subcutaneous tissue and the external intercostal muscle.

(3) A wound 1½ inches long, 1½ inches below the left crest of the ilium and ¾ of an inch from the center of the spine, laying bare the upper part of the sacrum and lower lumber vertebrae.

(4) A wound about 1½ inches long near the left side of the anus, which was about 4 inches in depth and in its apex the sacrum could be felt.

## LITERATURE.

Sir Charles Ball—The Rectum, 1908.
Max Bartel—Centralblat fur Chir., 1895.
E. Bircher—19 Jahresbericht der Kant Kranken Anstalt zu Aarau.
Borrough Cosens—British Medical Journal, 1905, January 21st.
Deetz—Dt. Zeitschrift fur Chir., 1905, LXXIX 322.
Elbogen—Centralblat fur Chir. No. 48, 1902.
Flick—Beitrage zur Klin. Chir., 1905, XLVI, 121.
Gant—Diseases of the Rectum, 3rd Ed.
Grabley—Inaugural Dissertation Kiel, 1903.
Koenig—Specielle Chir., 7th Ed.
Kimmerle—Beitrage zur Klin. Chir., 1910. LXVI, p. 219.
Lichmann—Prag. Med. Wochenschrift No. 26, 1904.
Leiblein—Münich Med. Wochenschrift No. 49, 1902.
Madelung—Deutsch Med. Wochenschrift, 1890, No. 1.
Moynihan—Abdominal Operations.
Neumann—Deutsche Med. Wochenschrift, No. 33, 1899.
Neumann—Centralblatt fur Chir., 1899, No. 28.
Quenu—Plaies du Rectum Revue de Chirugie, 1900.

Staff—korespondenzblätter des allgemeinen ärztlichen Vereines zu Thüringen, 1902.
Stiassny—Bruns Beitrage Bd., 28, 1900.
Rubritius—Prager medisinische Wochenschrift Nr. 47 and 48, 1903.
Tillmanns—Deutsche Chirurgie, 1905.
Van Hook—Med. Detroit, 1896.
Warmen—Centralblatt fur Gyn., 1897.
J. Collins Warren—Boston Med. & Surgical Journal Catalogue, Warren Museum.

## DISCUSSION.

Dr. J. L. Yates, Milwaukee: Owing to the extreme care with which this paper has been prepared, so little can be said in addition to it that discussion is virtually superfluous.

A few points, however, may well be accentuated. The mortality is due in a considerable number of cases to shock rather than infection. In cases of severe impalement, where the foreign body is securely fixed, it is wiser instead of trying to remove the pale at once, to do so only after the patient is brought to the place of operation, because removing the stake often causes increased hemorrhage, which has been blocked, additional shock is produced by the pain thus provoked. A large proportion of the cases where the writer reports shock as the cause of death, is where there had been severe injury to the testicle, causing a great amount of pain. The utmost care should be used to eliminate all possible distress, and for this reason a large dose of morphine should promptly be given.

Three other forms of impalement should be mentioned; one in examinations per rectum of pelvis, where the person uses too much force and perforates the rectum. Another form is perforation of the uterus in abortion. This is not rare. Third, the form that was recently reported by Dr. Wyllys Andrews in Chicago, namely, compressed air impalement. Laborers working in plants in which they have compressed air conducted in tubes, not infrequently as they use the tube to blow dirt from clothing, they get air forced into the rectum, and rupture of the colon with consequent pneumoperitoneum, demanding immediate operation. Dr. Andrews, previous to the time of his first experience, had never heard of a case. A little later, at the time of his report, he had seven or eight collected from just around Chicago.

W. G. Doern, Milwaukee: My experience with impaling injuries has been limited to minor cases outside of bullet wounds. Dr. Habhegger has covered the field very thoroughly, and he has reviewed the statistics. In the report of the cases, one point which impressed me was the fatalities in the more or less minor impalements. Apparently slight impalement of the perineum, without injury to organs, resulted in infection cellulitis, many cases proving fatal. It impresses upon us the importance of very thorough and careful examinations of these injuries, and the establishment of free drainage, whether the injury be extensive or whether it be slight.

With respect to impalements of the third degree, I wish to raise just one point, and that is the question of the extent of operation in the third degree impalements, those which extend deeply into the body, with probable

injury to the organ. Here the patient is likely to be in a state of shock from the injury itself. The suggestion of Dr. Yates of putting the patient under the influence of sedatives immediately to check the shock is very well taken. The further treatment will depend upon the skill of the surgeon largely. In these severe impalements it is necessary to do what you are going to early. Many times a skilled surgeon is not to be had immediately, and to wait until you get a skilled surgeon may mean the death of your patient. In those instances it is necessary for less skilled men, perhaps, to go in and establish drainage. Even in the hands of skilled men, as in the case mentioned by Dr. Habhegger, for instance, the operation under ether anaesthesia took three hours—three hours of operating and three hours of ether is not a good thing for any patient in any condition—and it is a question right there, even in the hands of the skilled surgeon, whether it is advisable to complete that operation and repair the injuries, or whether you should go in, establish drainage, close up the leaks, bring the intestines that may be injured to the surface where they can empty themselves externally instead of into the peritoneal cavity, and letting the case go until a more suitable time for completion of the operation. In severe injuries. with the patient nearly in a state of shock, do not shock him too much by doing too perfect a repair of the injured parts.

Then there arises the question of the anaesthetic. Ether and chloroform in infectious cases and shock cases are always dangerous. Ether and chloroform reduce the resisting forces of the individual very materially, as indicated by the opsonic index. The resisting forces are reduced by ether anaesthesia very greatly, just at the time when you want the natural fighting forces of the individual at their maximum. But you have them reduced to their minimum, and therefore gives the infection an opportunity to get your patient. If you have gas given under those conditions, nitrous oxide and oxygen and morphine will give you a much safer anaesthetic to do the operation necessary for these emergency cases, than any other anaesthetic.

Dr. Habhegger (Closing): I have nothing much to add to what has been said. I wish to call attention to one thing, however, that patients who are impaled, on whatever the object may be, except in cases where the scrotum and testicle are involved, do not think that they are seriously hurt, and often walk long distances to hospitals to obtain treatment. I might cite the case reported by Tillman, of a patient who walked four miles to a hospital and died three or four hours later. The patient that I treated, absolutely did not realize that he was injured very severely. The intestine protruded from the anus. and he held it up with a warm towel and walked to the telephone and called up the doctor, and on the way to the hospital he said he had very little pain, and his condition was excellent.

Now, I want to make the point that these patients do not act like severely injured patients. In the majority of even intraperitoneal impalements, the patients themselves do not realize that they are severely hurt, nor does their condition indicate it, especially when the injury is through the anus. The upper part of the rectum has very little sensibility and causes little pain, and we frequently hear of a patient giving himself an injection and thus perforating his own rectum.

# WISCONSIN MEDICAL JOURNAL

OFFICIAL PUBLICATION OF THE STATE MEDICAL SOCIETY OF WISCONSIN.

A. W. MYERS, M. D., Editor.
141 Wisconsin Street, Milwaukee.

J. P. McMAHON, M. D., Managing Editor.
141 Wisconsin Street.



Publication Committee:

A. J. Patek, M. D., Milwaukee.
O. H. Foerster, M. D., Milwaukee.
G. E. Seaman, M. D., Milwaukee
C. S. Sheldon, M. D., Madison.
S. S. Hall, M. D., Ripon.

Collaborators:

The Council.

M. R. Wilkinson.....Oconomowoc
G. Windesheim.....Kenosha
F. T. Nye.....Beloit
W. Cunningham.....Platteville
J. V. Mears.....Fond du Lac
H. W. Abraham.....Appleton
Edward Evans.....La Crosse
T. J. Redelings.....Marinette
O. T. Hougen.....Grand Rapids
R. U. Cairns.....River Falls
J. M. Dodd.....Ashland
H. E. Dearholt.....Milwaukee



Annual Subscription. - - - $2.00. Single Copies, - - - - - $0.20

Address all business communications to
WISCONSIN MEDICAL JOURNAL,
504 Goldsmith Building, Milwaukee.

[Entered as second class matter, June 30th, 1903, at the Post Office at Milwaukee, Wis., under Act of Congress, March 3rd, 1879.]

Vol. X. FEBRUARY, 1912. No. 9


## EDITORIAL COMMENT.

### THE DANGER OF TYPHOID FEVER TO THE ATTENDING PHYSICIAN.

Among the news items in the January Journal were the reports of the illness of four of the members of the medical profession in Wisconsin with typhoid fever, together with the announcement of the death of another physician from the same malady. The death of Dr. Dvorak of La Crosse from the same cause was recorded in the November Journal.

With so much polluted water throughout the state it is possible that all of these cases were the result of infection occurring in the usual manner. But this hardly seems probable.

In the practice of medicine it is perfectly true that "familiarity breeds contempt" and the constant seeing of cases of typhoid is apt to make one a little careless about the details of personal disinfection after handling patients suffering with this disease. But the fact that so large a number of cases have occurred among physicians in so short a time should rouse us to the need of practicing what we preach. Medical cases require asepsis just as do surgical cases. Let us bear the importance of this fact in mind for our own safety as well as for that of our patients.

A second suggestion brought to us by a consideration of the frequency of typhoid fever among physicians, is that of the desirability of having medical men, especially those in general practice, protect themselves against infection by the prophylactic use of antityphoid vaccine. The discomfort and inconvenience following the administration are so slight and the protection afforded is so valuable that no physician handling cases of typhoid can afford to neglect it.

## AS THE PUBLIC SEES IT.

The following paragraphs are not taken from a medical journal but from the Brooklyn Daily Eagle of January 30, 1912. They show the feelings of the intelligent layman when an understanding of the "fee-splitting" proposition is presented to him.

"The honest union of doctors and surgeons is desirable for fellowship, study and exchange of experience. The proportioning of charges to the eminence of practitioners and measurably to the resources of patients is in a sense defensible. The differentiation of charges, based on the eminence of doctors and, within reason, on the wealth or poverty of patients, is also defensible, always provided that from doctors, paid by municipal government and in hospitals bountied by public money, the poor get as good service as the well to do, the 'rich' commanding only the comforts and luxuries, grateful to them but not essential to their professional treatment.

"That may be all right, but that is not this case. Collusion between surgeons and physicians is shown by the 'split fee' system which makes patients the victims of practitioners and surgeons and which presents both divisions of the profession as conspirators in the overmulcting of patients who are alike deceived and robbed. The scandal of this is bad. The temptation of this is worse. It is collusion. It breeds robbery. It is conspiracy and when exposed it tempts to organized perjury in denial of confederated plunder. It is as against medicine a sin akin to the sin against the Holy Ghost in

the realm of faith, and in any world the one sin should be eternally as unforgivable as the other.

"Honorable men of medicine should be of but one mind on this. They inwardly are, but too many of them fear to say they are. Their fear is the result of trade unionism in their profession, which they call by another name. Interest may deceive them. It does not deceive other men of equal intelligence. And 'God is not mocked' nor deceived by it. He is not more conscious of 'the blood of His innocents' than He is of the moral rights of those made in His image and likeness.

"The necessity is reform. The question is, can the societies of physicians and surgeons assure this reform. In medicine as in politics, the question is can reform from the inside be expected or must reform from the outside be invoked and secured? Partisans are not more insistent than physicians on the capability of reform from the inside. Partisans have been almost invariable wrong on that contention. It is to be seen whether physicians will be any more right than partisans on that contention. But by physicians or over or in spite of them the reform will come. That is unquestionable. That is what physicians should regard as inevitable. A race that has evolved surgeons from barbers, writers from tramp servitors and physicians from voodoo conjurers will find the means of evolving the reforms that are inevitable from the medical profession or from forces outside of it more progressive than that profession may show itself to be."

This is strongly stated, but not one whit too strong. No statement of the rottenness of this practice could be too strong. Let us take up this subject for earnest consideration at the next meeting of the State Medical Society and see if it cannot be eradicated. It is the gravest danger to the medical profession at the present time and its seriousness is increased by the secret, insidious character of its evil influence.

---

## NEWS ITEMS AND PERSONALS.

**Drs. E. T. Ridgway and B. Schallern** have formed a partnership at Ripon.

**Dr. Harry Vedder,** Edgar, who has been ill with typhoid fever has recovered.

**Dr. J. J. Laird,** Black Creek, is confined to his home with inflammatory rheumatism.

**Dr. D. B. Reinhart,** for the past several years health commissioner of Merrill, has resigned.

**Dr. John R. Minahan,** Green Bay, suffered a loss of $12,000 by a fire which destroyed his residence.

**Dr. W. H. Bartran,** Green Bay, has been appointed road physician for the Green Bay and Western Railway system.

**Dr. G. W. Newell,** Burlington, is at Mercy Hospital, Chicago, where he is receiving treatment for an infection of the eye.

**Dr. A. J. Krahn,** Beaver Dam, has been appointed physician for the Chicago, Milwaukee and St. Paul Railway, at that city.

**Dr. Edward F. Christian,** La Crosse, who has been seriously ill at the Lutheran Hospital since December 26, is slowly recovering.

**Dr. J. R. Currens,** Two Rivers, was tendered a banquet on January 31 at the Hotel Waverly, the occasion being his 57th birthday.

**Dr. E. W. Crosby,** Armott, sustained a fracture of the right leg on Feb. 13, when the cutter in which he was driving was overturned.

**Dr. Alfred Carthaus,** for the past year interne at St. Joseph's Hospital, Milwaukee, has been appointed assistant surgeon at the Milwaukee Soldiers Home.

A warrant has been issued for the arrest of Prof. R. Travers Allen of Portage and Hillsboro, charging him with practicing medicine without a license.

**Dr. R. J. C. Strong,** assistant physician at the State Tuberculosis Sanatorium at Wales, for the past three years, has resigned and will take up his residence at Milwaukee.

**Dr. W. C. Dickens,** Wausau, met with an accident on January 15th. While descending the stairs in his house, he missed a step and fell sustaining a fracture of the right forearm.

**Sister Matilda,** for the past eight years superintendent at the St. Francis Hospital, La Crosse, died at that institution on January 26th of Carcinoma of the stomach. The La Crosse County Medical Society, as a tribute of respect for the deceased, attended her funeral services in a body.

**Dr. K. W. Doege,** Marshfield, has won a suit brought against him by the administrator of the estate of August Arendt, Stevens Point, who sought to recover $10,000 damages from Dr. Doege, because the latter's auto was alleged to have caused Arendt's team to run away killing him.

**Dr. J. P. Fletcher,** formerly of Janesville, has been appointed resident surgeon at the government hospital at Catabato, on the island of Mindanao. This hospital is located six degrees north of the equator and is in the vicinity of the Zulu Islands.

**Dr. James A. Bach** has been elected president of the medical staff of St. Mary's Hospital, Milwaukee. The other officers are: vice-president, Dr. A. T. Holbrook; secretary, Dr. Hans Reinhardt. A free clinic will soon be opened.

Drs. J. B. Murphy and John F. Golden, Chicago, staff physicians at Mercy Hospital, are being sued for $50,000 damages for alleged malpractice. The complainant is the Rev. Owen J. Small, a Roman Catholic clergyman of Dubuque, Iowa.

**Dr. R. A. Vorpahl,** Elkhorn, has disposed of his practice to Dr. Arthur M. Tweedie of Cleveland, Ohio, and has gone to Chicago where he will enter the Polyclinic College of Surgery for a three months course, after which he will go to Berlin, Germany and Paris, France.

Under the auspices of the Waukesha County Medical Society, Dr. J. N. Hurty of Indianapolis, Ind., member of the Council on Health and Public Instruction of the American Medical Association and of the State Board of Health of Indiana, will deliver an address upon "How Not to be Sick" at a public meeting to be held at the Methodist Church, Waukesha, Wednesday evening, April 3rd, at 8:15.

**Removals.** Dr. C. Christensen, Kendall to Westby.
Dr. Erwin Cary, Bear Creek to Reedsville.
Dr. G. H. Perrin, Wauzeka to Menomonie Falls.
Dr. C. A. Lathrop, Sharon to Tomahawk.
Dr. I. D. Wiltrout, Eau Claire to Hudson.
**Dr. J. W. Ovitz,** Platteville, has removed to Genoa, Ill.

Dr. John M. Beffel, secretary of the State Board of Medical Examiners, who has been asked by the state branch of the German American Alliance to investigate the charges that German physicians are discriminated against when taking the examinations for the right to practice in this country, said there is no truth in the allegations. He also said that the board has not received an application from a German physician to take an examination for a long period of time.

The new $80,000 addition to the **Milwaukee Hospital** will be ready for occupancy May 1, 1912.

It is expected that at least one wing, the heating plant, the administration building and the garage of the new isolation hospital, Milwaukee, will be ready for opening in the spring and that before the end of the year the city will have its first adequate isolation hospital. When completed the buildings will occupy the center of an entire square block.

**Dr. William F. Whyte,** Watertown, president of the State Board of Medical Examiners, is being sued by Dr. R. B. Hoermann, Milwaukee, for damages in the sum of $25,000.

Dr. Hoermann alleges that Dr. Whyte defamed him by writing to Allan D. Conover, a member of the state board of control, on Jan. 13, 1910, criticising Dr. Hoermann's appointment as an examiner for the Wales institution, and asserting that the board did not have the right to make it because Dr. Hoermann "was not in good standing".

**Deaths.** Dr. J. W. St. John, Janesville, died on January 13, 1912. James W. St. John was born Oct. 30, 1839, at Janesville. His early education was received at Janesville, and when 18 years old he went to Castleton, Vermont, where he attended a seminary for a year. In 1859 he took up the study of medicine.

Soon after the beginning of the war, Dr. St. John enlisted as a medical cadet and saw six months service at Memphis, Tenn., and immediate vicinity. Later he entered the Chicago Medical College and graduated in 1865. He then returned to Janesville and opened up a practice which was continued until failing health recently compelled him to relinquish it.

Dr. H. B. Cole, Black River Falls, died on January 14th after an illness of several weeks duration, aged 73.

Dr. Cole was born at Carmel, in Putnam County, New York on July 6, 1838. He graduated from the University Medical College, New York City in March, 1860. In 1862 he was commissioned assistant surgeon of the 128th regiment, New York Volunteer Infantry, in the Civil War and served in the Department of the Gulf, at New Orleans until July, 1865, part of the time under Surgeon J. B. G. Baxter. After the close of the war he formed a partnership with his chief, and they located at Black River Falls and practiced there until 1870, when Dr. Baxter removed to Washington, Dr. Cole continuing at Black River Falls until compelled to retire recently.

Dr. G. H. Haddy, Park Falls, died on January 31, aged 55 years. Dr. Haddy graduated from the Louisville Medical College, Louisville, Ky., in 1882. He at one time practiced at Eagle River and Minocqua, but of late years had been located at Park Falls.

He was a member of the Price-Taylor County and State Medical Associations.

## THE AMERICAN HOSPITAL ASSOCIATION.

Next Meeting Detroit, Mich., Sept. 24th, 25th, 26th and 27th, 1912.

*Its Work and Its Aims.*

The American Hospital Association is composed of hospital trustees, managers, trustees, contributors and officers of associations founded to promote the interests of organized medical charities. It aims to promote economy and efficiency in hospital management, to educate the public regarding hospital needs, to disseminate information regarding every phase of hospital work, to assist those who are carrying hospital burdens, and in every possible way, to improve the care of the sick.

During the dozen or more years of its existence, it has given much study to hospital construction, called attention to defects and mistakes, pointed out causes of difficulties and methods of improvement, thereby rendering a distinct service to hospitals recently constructed, and to the hospitals of the future.

It has devoted time and earnest thought to improving methods of bookkeeping and accounting for hospitals, and has recommended a system of uniform accounting and reporting applicable alike to larger and smaller hospitals, thus aiding materially in bringing about more systematic and business methods in its own particular field.

Keeping in view the interests and needs of hospitals of varied sizes and conditions, of the nurses, and of the public, it has given a serious and prolonged study to the training of nurses, and has recommended a course of training which has been adopted by large numbers of hospitals in the United States and Canada, thus doing much to standardize the work of that important department, and render it more efficient.

Questions regarding hospital finance, and prevention of waste, medical organization, management of infectious diseases, the out-patient department, social service, municipal needs and policies relating to the care of the sick, hospital dietaries, the best method of purchasing, the training of superintendents and heads of departments, hospital accidents, and a great variety of similar practical subjects, important to all hospitals, have been discussed, so that the experience of one hospital might be made known and used for the benefit of all.

The American Hospital Association welcomes to its membership and councils, the representatives and supporters of the smallest hospitals, as well as those of larger institutions. It needs their support and assistance, and invites the active co-operation of every hospital in the United States and Canada.

Believing that the establishment of a central bureau of hospital information in which would be filed plans and information regarding construction and every phase of hospital information, would be a distinct help and benefit to hospitals in general, the American Hospital Association has committed itself to that object and is now working diligently to that end. The addition of several hundred new members to the already large and growing list is necessary before the important object can be realized.

Every member of the Association can help bring the goal of the hospital workers' ambition one step nearer, by securing annually one or more members for the Association.

You are earnestly invited to assist in this undertaking to co-operate in promoting the usefulness and general welfare of the organization and to participate in the benefits to be derived by becoming a member of the American Hospital Association. Those who can not take an active part in the work the Association is doing, can greatly assist by retaining their membership by payment of the annual fee, giving the Association the benefit of their name and influence.

Copies of this leaflet and application form for membership may be had by addressing the Secretary, Dr. J. N. E. Brown, Toronto, Canada.

Fourteenth Annual Conference to be held in Detroit, Michigan, September 24, 25, 26 and 27, 1912.

### Opening New Post-Graduate Medical School Building.

On January 11th the new building of the New York Post-Graduate Medical School was opened to inspection and use. The plant provides for eleven operating rooms and groups of teaching rooms for each of the Departments, besides extending the capacity of the Hospital service to about 400 beds. The curriculum of the school is correspondingly extended and adapted to the tripled facilities.

### Bureau of Public Health and Marine-Hospital Service.

A board of commissioned medical officers will be convened to meet at the Bureau of Public Health and Marine-Hospital Service, 3 B. Street, SE., Washington, D. C., Monday, April 8, 1912, at 10 o'clock A. M., for the purpose of examining candidates for admission to the grade of assistant surgeon in the Public Health and Marine-Hospital Service.

Candidates must be between 22 and 30 years of age, graduates of a

reputable medical college, and must furnish testimonials from responsible persons as to their professional and moral character.

The following is the usual order of the examinations: 1, physical; 2, oral; 3, written; 4, clinical.

In addition to the physical examination, candidates are required to certify that they believe themselves free from any ailment which would disqualify them for service in any climate.

The examinations are chiefly in writing, and begin with a short autobiography of the candidate. The remainder of the written exercise consists in examination of the various branches of medicine, surgery, and hygiene.

The oral examination includes subjects of preliminary education, history, literature, and natural sciences.

The clinical examination is conducted at a hospital, and when practicable, candidates are requested to perform surgical operations on a cadaver.

Successful candidates will be numbered according to their attainments on examination, and will be commissioned in the same order as vacancies occur.

Upon appointment the young officers are, as a rule, first assigned to duty at one of the large hospitals, as at Boston, New York, New Orleans, Chicago, or San Francisco.

After four years' service, assistant surgeons are entitled to examination for promotion to the grade of passed assistant surgeon.

Promotion to the grade of surgeon is made according to seniority and after due examination, as vacancies occur in that grade.

Assistant surgeons receive $1,600, passed assistant surgeons $2,000, and surgeons $2,500 a year. When quarters are not provided, commutation at the rate of $30, $40 and $50 a month, according to grade, is allowed.

All grades above that of assistant surgeon receive longevity pay, 10 per cent in addition to the regular salary for every five years' service up to 40 per cent after twenty years' service.

The tenure of office is permanent. Officers traveling under orders are allowed actual expenses.

For further information, or for invitation to appear before the board of examiners, address "Surgeon-General, Public Health and Marine-Hospital Service, Washington, D. C."

In harmony with the policy of publishing "Symposium Numbers," at intervals, on timely subjects, the Editors of the *Interstate Medical Journal* have outlined a number on "Diseases of the Digestive Tract" for March, 1912.

ORIGINAL ARTICLES.

*Points in the Diagnosis and Non-Surgical Treament of Duodenal Ulcer* ..... George Herschell, M. D., London.
*Proctoscopy and Sigmoidoscopy* ..... Prof. H. Strauss, Berlin.
*The X-Ray In the Diagnosis of Gastro-Intestinal Diseases* ..... Ludwig Kast, M. D., New York.
*Diagnostic Value of the Test for Occult Blood in the Stomach Contents and Feces* ..... W. H. Soper, M. D., St. Louis.
*The Diagnosis of Cancer of the Stomach* ... J. W. Weinstein, M. D., New York.
*Splanchnoptosis: Enteroptosis* ..... John C. Hemmeter, M. D., Baltimore.

*Some General Remarks on the Treatment of Gastric Diseases*.....Jacob Kaufmann, M. D., New York.
*Intestinal Parasites*.....C. C. Bass, M. D., New Orleans.
*Duodenal Alimentation*.....Wm. Gerry Morgan, M. D., Washington.

COLLECTIVE ABSTRACTS.

(*Critical Editorial Reviews of Recent Literature in Collective Form.*)

*Enteroptosis and the Enteroptotic Habitus*.....Jesse M. Myer, M. D., of the Editorial Staff.
*Most Recent Therapy of Constipation*, .....William Engelbach, M. D., of the Editorial Staff.
*The X-Ray in Intestinal Diagnosis*.E. H. Skinner, M. D., of the Editorial Staff.
*Gastric Neuroses*.....Sidney I. Schwab, M. D., of the Editorial Staff.
*Recent Surgery of Stomach and Intestines*.....M. B. Clopton, M. D., of the Editorial Staff.

---

**A Manual of Materia Medica.** By E. QUIN THORNTON, M. D., Assistant Professor of Materia Medica in the Jefferson Medical College, Philadelphia. Octavo, 525 pages. Cloth, $3.50, net. Lea & Febiger, Philadelphia and New York, 1911.

A workman who does not know how to use his tools is a pathetic object, and yet that is the position of many a graduate in medicine with respect to the Materia Medica.

Professor Thornton has prepared a very thorough, yet compact textbook and work of reference on the basis of therapeutics, namely the Materia Medica, a department which is coming in for renewed recognition as to its rightful importance. He opens with a section on posology, prescription writing, including its Latin essentials, incompatibilities, weights and measures, and then proceeds to the body of the book, which is devoted to the description of all drugs, chemicals and preparations official in the U. S. Pharmacopoeia. In the third and closing part he gives a complete list of these preparations, rearranged according to pharmaceutical classes, with their composition and methods of preparation.

Some book of this character should be on the shelves of every physician and should be frequently referred to, for it is a needless tax upon the memory to try to carry all the useful information it contains in one's own head. It would be as sensible for the surgeon to try to carry all his instruments with him whenever he made a call.

And among the books of this character, Dr. Thornton's volume is to be most highly commended for its accuracy, its completeness, its compactness, and its convenience.

---

# THE STATE MEDICAL SOCIETY OF WISCONSIN

ORGANIZED 1841

## Officers 1911-1912.

J. M. DODD, Ashland, President.

T. J. Redelings, Marinette, 1st Vice-President.

C. A. Armstrong, Boscobe, 2d Vice-President.

H. F. Dearholt, Milwaukee, 3rd Vice-President.

CHAS. S. SHELDON, Madison, Secretary.

S. S. HALL, Ripon, Treasurer.

ROCK SLEYSTER, Waupun, Assistant Secretary.

## Councilors.

TERM EXPIRES 1917.

1st Dist., M. R. Wilkinson, - Oconomowoc
2nd Dist., G. Windesheim, - - Kenosha

TERM EXPIRES 1914.

7th Dist., Edward Evans, - - La Crosse
8th Dist., T. J. Redelings, - Marinette

TERM EXPIRES 1912.

3rd Dist., F. T Nye, - - Beloit
4th Dist., W. Cunningham, - - Platteville

TERM EXPIRES 1915.

9th Dist., O. T. Hougen, - - Grand Rapids
10th Dist., R. U. Cairns, - - River Falls

TERM EXPIRES 1913.

5th Dist., J. V. Mears, - Fond du Lac
6th Dist., H. W. Abraham Appleton

TERM EXPIRES 1916.

11th Dist., J. M. Dodd, - Ashland
12th Dist., H. E. Dearholt, Milwaukee

## Delegates to American Medical Association.

L. F. Bennett, Beloit. C. S. Sheldon, Madison. A. H. Levings, Milwaukee

## Alternates.

F. S. Wiley, Fond du Lac. Wilson Cunningham, Platteville. R. G. Savle, Milwaukee

## Committee on Public Policy and Legislation.

A. W. Gray, Milwaukee, Chairman. J. P. McMahon, Milwaukee. F. F. Bowman, Madison.

## Committee on Medical Defense.

G. E. Seaman, Milwaukee, Chairman. S. S. Hall, Ripon. A. J. Patek, Milwaukee.

## Committee on Prevention of Tuberculosis.

C. A. Harper, Madison. G. E. Seaman, Milwaukee. M. P. Ravenel, Madison.
J. M. Beffel, Milwaukee. C. H. Stoddard, Milwaukee.

## Program Committee.

A. W. Gray, Milwaukee, Chairman.

## NEXT ANNUAL SESSION, WAUSAU, MAY 22, 23 AND 24, 1912.

The Wisconsin Medical Journal, Official Publication.

## LIST OF EXECUTIVE OFFICERS OF COUNTY MEDICAL SOCIETIES.

| County. | President. | Secretary. |
|---|---|---|
| Ashland-Bayfield-Iron | J. M. Meyers, Odanah | J. M. Dodd, Ashland. |
| Barron-Polk-Washburn-Sawyer-Burnett | H. B. Crommett, Amery | I. G. Babcock, Cumberland. |
| Brown-Kewaunee | T. J. Oliver, Green Bay | I. E. Levitas, Green Bay. |
| Calumet | W. Martens, New Holstein | J. A. Schmidt, Brillion. |
| Chippewa | A. W. Willmarth, Chippewa Falls | A. L. Beler, Chippewa Falls. |
| Clark | H. H. Christofferson, Colby | E. L. Bradbury, Neillsville. |
| Columbia | B. C. Meacher, Portage | A. J. Batty, Portage. |
| Crawford | A. E. Dillman, Steuben | A. J. McDowell, Soldiers Grove. |
| Dane | Joseph Dean, Madison | C. S. Sheldon, Madison. |
| Dodge | J. A. Clason, Neosho | G. W. Henika, Beaver Dam. |
| Door | | |
| Douglas | T. J. O'Leary, Superior | W. E. Hatch, Superior. |
| Dunn-Pepin | A. F. Helsing, Menomonie | B. J. Steves, Menomonie. |
| Eau Claire | H. A. Fulton, Eau Claire | E. L. Mason, Eau Claire. |

| County. | President. | Secretary |
|---|---|---|
| Fond du Lac | G. F. Scheib, Fond du Lac | F. A. Read, Fond du Lac. |
| Grant | C. R. Pickering, Muscoda | M. B. Glasier, Bloomington. |
| Green | L. A. Moore, Monroe | G. S. Darby, Brodhead. |
| Green Lake-Waushara-Adams | G. E. Baldwin, Green Lake | R. H. Buckland, Green Lake. |
| Iowa | W. S. Lincoln, Dodgeville | W. M. Gratiot, Mineral Point. |
| Jefferson | L. J. Bennett, Ft. Atkinson | C. R. Feld, Watertown. |
| Juneau | C. O. Cron, Camp Douglas | A. T. Gregory, Elroy. |
| Kenosha | H. A. Robinson, Kenosha | C. H. Gephart, Kenosha. |
| La Crosse | C. H. Marquardt, La Crosse | G. W. Lueck, La Crosse. |
| Lafayette | J. C. Hubenthal, Belmont | Susanne Orton, Darlington. |
| Langlade | M. J. Donohue, Antigo | J. C. Wright, Antigo. |
| Lincoln | C. C. Walsh, Merrill | Herbert Saylor, Merrill. |
| Manitowoc | J. R. Currens, Two Rivers | A. J. Shimek, Manitowoc. |
| Marathon | L. E. Spencer, Wausau | S. M. B. Smith, Wausau. |
| Marinette-Florence | H. F. Schroeder, Marinette | M. D. Bird, Marinette. |
| Milwaukee-Ozaukee | J. J. McGovern, Milwaukee | Daniel Hopkinson, Milwaukee. |
| Monroe | A. E. Winters, Tomah | A. R. Bell, Tomah. |
| Oconto | J. B. Atwood, Oconto | R. C. Faulds, Abrams. |
| Oneida-Forest-Vilas | J. M. Hogan, Oshkosh | C. A. Richards, Rhinelander. |
| Ontagamie | V. F. Marshall, Appleton | J. P. Dohearty, Appleton. |
| Pierce | E. R. Holliday, Ellsworth | S. F. Rudolf, Ellsworth. |
| Portage | J. D. Lindores, Stevens Point | W. F. Cowan, Stevens Point. |
| Price-Taylor | C. E. Nystrum, Medford | G. H. McClure, Westboro. |
| Racine | E. A. Taylor, Racine | Susan Jones, Racine. |
| Richland | P. G. Lasche, Ithaca | A. D. Campbell, Richland Center. |
| Rock | W. J. Allen, Beloit | E. B. Brown, Beloit. |
| Rusk | G. M. Carnahan, Bruce | W. F. O'Connor, Ladysmith. |
| Sauk | | Roger Cahoon, Baraboo. |
| Shawano | E. Puckner, Wittenberg | Dr. Steubenvoll, Shawano. |
| Sheboygan | Edward Felter, Plymouth | W. F. Zlerath, Sheboygan. |
| St. Croix | O. H. Epley, New Richmond | Boyd Williams, Hudson. |
| Trempealeau-Jackson-Buffalo | C. F. Peterson, Independence | H. A. Jegl, Galesville. |
| Vernon | John Schee, Westby | F. E. Morley, Viroqua. |
| Walworth | R. E. Rugh, Lake Geneva | M. V. Dewire, Sharon. |
| Washington | F. P. Leich, Jackson | S. J. Driessel, Barton. |
| Waukesha | J. H. Voge, Oconomowoc | R. E. Davies, Waukesha. |
| Waupaca | T. E. Loope, Iola | G. T. Dawley, New London. |
| Winnebago | B. C. Gudden, Oshkosh | W. L. Herner, Winnebago. |
| Wood | J. A. Jackson, Rudolph | J. B. Vedder, Marshfield. |

## SOCIETY PROCEEDINGS.

### ANNUAL MEETING OF COUNCIL.

The Annual Meeting of the Council was held Jan. 17, at the rooms of the Milwaukee Medical Society, and was called to order by President Dodd at 11:30 A. M. There were present Councilors Wilkinson, Windesheim, Nye, Mears, Hougen, Dodd and Dearholt, and Messrs. Hall, Sleyster, McMahon, Myers, Patek, and Sheldon. The Secretary reported the 1911 Membership to date as 1633, and a probable membership of 1650 before the end of the fiscal year in April. The reports from the twelve Councilor Districts showed a gain over the total 1910 membership in seven, and a loss in five, and the Secretary gave it as his opinion that the organization of the 53 County Medical Societies is far stronger than ever before, and that all of the organizations can be permanently maintained.

The Reports of the various Councilors followed, with especial reference to the scientific work now being carried on. The Reports seemed to indicate that, while there is still vast room for improve-

ment, the educative process is going on and that the "Medical Society Spirit" is gaining ground year by year.

The plan of the Committee on Health and Public Instruction of the A. M. A. to hold six or eight meetings in Wisconsin was approved, and the Secretary requested to make the necessary arrangements.

He was also requested to complete the list of speakers available for County Secretaries and send to every County Secretary.

The Annual Report of the Committee on Publication was made by the Managing Editor of the "Journal", Dr. J. P. McMahon. The Report was adopted and placed on file. The thanks of the Council were unanimously tendered Drs. Myers and McMahon for their efficient management of the Journal, and the Council also voted to use every effort to increase the legitimate advertising of the Journal.

The Secretary of the Society was also instructed to enlist the co-operation of the County Secretaries in the same work.

The Report of the Committee on Publication showed that the Journal had been published at a loss during the past year, largely because of loss and rejection of advertisements.

On motion the action of the Treasurer, Dr. Hall, in forwarding $1,000 to make up the deficit was endorsed by the Council.

Dr. C. S. Sheldon was elected Secretary for the ensuing year, and Dr. S. S. Hall was elected Treasurer.

On motion adjourned.

C. S. Sheldon, *Secretary.*

## SECRETARY'S NOTES.

The mid-year report on membership is very satisfactory. The number who have paid the 1911 dues is already larger than the total 1910 membership, with some months to spare before the close of the fiscal year, April 15th. The total membership for 1910 was 1616. That of 1911, to date, is 1633, a gain of 17, which will be considerably increased.

Of our 53 component County Societies, 28 already show a gain over the total 1910 membership, 20 show a loss, while 5 remain the same. The societies making the greatest gains are: Green Lake-Waushara, 9; Milwaukee, 8; Sauk, Chippewa and Racine, 5; Grant, 4; Waukesha, Waupaca, Ashland and Dodge, each 3. Only 3 counties show a loss of over 3 members. Apparently the organization as a whole is in a healthful condition, and on a firmer basis than ever before. There has been a consistent average annual increase in membership of about 40 since the new plan was adopted, 7 years ago.

What is especially gratifying is, that the Northern Counties make rather a better showing than any others. The greatest net gain is in the 9th District, and the next greatest is in the 11th.

The County Secretaries are evidently doing good work in keeping up the membership and deserve the highest praise for their unselfish labors. This is good as far as it goes, but it is of far greater importance that, in each of these 53 societies, we shall see equal progress in securing all of the benefits which a properly conducted Medical Society is able to confer. It is unnecessary to say that simply an organization on paper, even if the dues are regularly paid, does not constitute a Medical Society in any proper sense. Like every other human agency, to be *useful*, it must be *used*. Whatever good shall come of it,—scientific, social or professional,—must be the result of careful and systematic planning by its officers, and the cordial co-operation of its members.

As so often urged, let the new administration plan a well-considered program for the whole year. It is a good plan to print it in durable form, on card-board, and have it posted in some conspicuous place in the offices of the members, for ready reference. Of course the notice for each meeting should be sent out as usual.

Special attractions, in the way of prominent physicians outside the Society, will increase the attendance, but this should be simply a means to an end; and it should be borne in mind that, after all, the most important function of the Medical Society is to develop the working capacity of its own membership.

### THE ANNUAL MEETING

will be held at Wausau, May 22, 23, and 24, in less than four months. Everything points to a most successful meeting. The Wausau brethren have resolved to discount all previous performances. The program is not yet completed, and if any members wish to present volunteer papers, they should send them in at once to Dr. A. W. Gray, Milwaukee, Chairman Program Committee.

The Committee on Health and Public Instruction of the A. M. A. wish to hold about eight "Open Meetings" in this State during the next three or four months. The various County Societies where the meetings are held, will have charge of the local arrangements, while the A. M. A. pays all expenses of the speakers who may be sent here. An attractive list of speakers from adjoining States has been furnished, from which we may make a selection, and every effort will be made to make these meetings thoroughly popular, and to secure a large attendance by the general public.

Applications for these meetings have been already received from Waukesha, Wausau, Grand Rapids, Kenosha, and Beloit. Other towns wishing to hold meetings should send me their applications at once.

A list of physicians in Wisconsin available for talks or papers before County Societies is being prepared, and, when completed, will be sent to all the County Secretaries. It is understood that the expenses of the speakers to and from the meeting will be paid by the County Society. Professors in the University of Wisconsin have agreed to give papers as follows:

Professor A. S. Loevenhart—

1. Antiseptics in the Treatment of Septic Conditions.
2. Respiration from the Therapeutic Standpoint.
3. Anesthetics.

Professor H. C. Bradley—

1. Hyperthyroidism and Drinking Water.
2. Digestion.

Professor J. A. E. Eyster—

1. Venous Pulse in Diagnosis.
2. Electrocardigrams in Diagnosis.
3. Clinical Measurements of Blood Pressure.

Professor W. J. Meek—

1. Coagulation of the Blood.

Professor C. H. Bunting—

1. The Blood.
2. The Ductless Glands.

Professor M. P. Ravenel—

1. Newer Aspects of the State Hygienic Laboratory.

Members of the Society have sent in subjects as follows:

Dr. J. P. McMahon, Milwaukee—
"Axis-Traction Forceps."

Dr. Rock Sleyster, Waupaca—
"Booster Talks."

Dr. C. A. Harper, Madison, Secretary State Board of Health—
"Some Phases of the Work of the State Board."

If there are other members of the Society who wish to add their names to this list, they are urgently requested to send in their subjects at once to the State Secretary. C. S. S.

## BROWN COUNTY MEDICAL SOCIETY.

At the annual meeting of the Brown County Medical Society, held on January 26, Dr. T. J. Oliver was elected president, Dr. Julius J. Bellin, vice-president, Dr. I. E. Levitas, secretary-treasurer; Dr. A. W. Slaughter, censor; Dr. W. W. Kelly, delegate.

## JEFFERSON COUNTY MEDICAL SOCIETY.

The annual meeting of the Jefferson County Medical Society was held in Watertown, January 26th, in the public library. The meeting was largely attended. The following officers were elected for the ensuing year: President, L. J. Bennett, Ft. Atkinson; vice-president, W. T. Clark, Ft. Atkinson; secretary, C. R. Feld, Watertown; delegate, H. O. Caswell, Ft. Atkinson; censors, T. F. Shinniek, Watertown, and George A. Fiebiger, Waterloo.

The following papers were presented and discussed at the meeting: "Vomiting in Pregnancy," Dr. W. F. Whyte, Watertown, "Pernicious Anemia," Dr. Arthur J. Patek, Milwaukee; "Traumatic Insanity," Dr. Arthur Rogers, Oconomowoc.

After the meeting Dr. and Mrs. Feld entertained the members and their guests at a dinner at their home.

## KENOSHA COUNTY MEDICAL SOCIETY.

The regular monthly meeting of the Kenosha County Medical Society was held February 2nd at "The English Court". Drs. Corr and Murphy, our bachelor members, were the hosts of the evening. Members present: Drs. J. F. Hastings, S. W. Murphy, J. T. Corr, H. J. Stalker, J. H. Cleary, H. A. Robinson, C. R. Caughey, C. Palm, G T. Kimball, J. B. Spaulding, G. H. Ropley, M. A. Bernstein, F. E. Andre, P. P. M. Jorgensen, Wm. Pugh. G. Windesheim, Helen Harbert, and C. H. Gephart.

Dr. Robert B. Preble of Chicago was present and gave the address of the evening on *Diagnostic, Prognostic and Therapeutic Differences Between Cardiac and Cardio-Muscular Cases.*

Dr. A. J. Randall was elected to membership in the Society. This leaves but two desirable men in this county who are not members.

C. H. Gephart, M. D., *Secretary.*

## LACROSSE COUNTY MEDICAL SOCIETY.

The regular meeting of the La Crosse County Medical Society was called to order at the La Crosse Club, Feb. 1, 1912, by the President, Dr. Marquardt. After routine business had been transacted, the committee appointed to draft resolutions on the death of Dr. Dvorak reported as follows:

*Whereas*, it has pleased the Almighty to take from our midst Dr. M. W. Dvorak, the secretary of our county medical society, a most promising young colleague, an earnest, cheerful, constant and indefatigable worker, whose success was still in flower, before the culmination in the rich, ripe fruits of endeavor, therefore, be it

*Resolved*, that we deeply mourn his loss as a friend and as a physician, and that we extend to his family and his friends our most heartfelt sympathy in this hour of deepest sorrow, be it further

*Resolved*, that a copy of these resolutions be spread upon the records of this society and a copy presented to Dr. Dvorak's family.

Dr. Evans then reported a case of syphilitic fever, exhibited the chart showing the course of the fever and the result of treatment. In his preliminary remarks he called attention to how little any of us really knew of the history of medicine and to the unreliability of much of what is given to us as authentic.

The doctor promised to incorporate his remarks along this line into a paper to be given us at some future date.

Upon motion the officers were instructed to arrange for a social meeting some time during the following week.

On the evening of February 10, the medical society and invited guests, had a dinner at Schrank's Cafe and later adjourned to the new Elks Club Rooms, where a social time was enjoyed.

## LANGLADE COUNTY MEDICAL SOCIETY.

The Langlade County Medical Society met in the City Hall, February 14th, 1912. Meeting called to order by President M. J. Donohue at 8:30 P. M. Members present, M. J. Donohue, George H. Williamson, F. V. Waterson, C. J. Donohue, G. S. Bellis, George W. Moore, I. D. Siffen, and J. C. Wright.

A communication was read from Dr. L. R. Slyster, Waupun, relating to the duties of the County Secretaries and recommending the election of the County Secretary as delegate to State Medical Meeting, aiding in arranging program and creating as much enthusiasm as possible. Encouraging every doctor in the county to become a member, also let every member be a *Booster*. Dr. Sleyster's letter was well received and it was moved and carried that the communication be placed on file.

A communication was read from Dr. Sara Elliott of Waukesha, chairman of State Committee on Public Health and Education among women. Moved and carried that Dr. George W. Moore be chosen as chairman of the Committee on Public Health to affiliate with Dr. Elliott in assisting in carrying on the good work that has been done so much in bringing about pure water, pure milk, etc., etc.

Clinical cases were then taken up and some interesting cases reported. Election of officers resulted in the re-election of the same officers: President, M. J. Donohue; vice-president, George H. Williamson; secretary and treasurer, J. C. Wright.

Much business of an interesting nature was then taken up and the secretary was instructed to encourage the Legal Department of the State Medical Society to bring action against the Chiropractic of this City and as there have been several young men who have been under his instruction to notify the Secretary of the County where they locate to prosecute them at once and stop this practice which is a fake.

J. C. Wright was chosen delegate to State Medical Meeting to be held at Wausau and George W. Moore alternate.

The Society had a very interesting and instructive meeting and good fellowship seemed to prevail. The Society repairing to the Gem Restaurant where a fine spread awaited them of fried chicken, etc., followed by a smoker. We are anticipating another enthusiastic meeting the 29th of this month when we expect to have our old friend Dr. Dawley with us.

J. C. WRIGHT, M. D., *Secretary.*

## MONROE COUNTY MEDICAL SOCIETY.

The annual meeting of the Monroe County Medical Society was held at Sparta, January 9th, 1912, in the offices of Drs. Sarles, Beebe & Beebe, at 8 P. M.

Visiting physicians were entertained at dinner at the Hotel Lewis by the Sparta physicians.

Officers elected for 1912: President, Dr. A. E. Winters, Tomah; vice-president, Dr. W. B. Ford, Norwalk; secretary and delegate, Dr. A. R. Bell, Tomah; alternate, Dr. S. D. Beebe, Sparta; censor, for three years, Dr. C. H. Cremer, Cashton.

Paper by Dr. M. H. Cremer of Red Wing, Minn., on *Pancreatitis Associated with Gall Stones;* discussed by Dr. F. C. Stiles and Dr. W. B. Ford. Dr. L. S. Schuerick of Tomah read a paper on *Diagnosis of Incipient Tuberculosis;* discussed by Dr. C. M. Beebe and Dr. A. E. Winters.

The meeting extended a vote of thanks to Dr. M. H. Cremer. After the regular meeting a smoker was held until 12 P. M.

A. R. BELL, M. D., *Secretary.*

## PORTAGE COUNTY MEDICAL SOCIETY.

A meeting of the Portage County Medical Society was held with a good attendance, and in addition to the transaction of other business, the following officers were elected: President, Dr. J. D. Lindores; vice-president, Dr. D. S. Rice: secretary-treasurer, Wayne F. Cowan; censors, C. von Neupert. Jr., D. S. Rice, D. N. Alcorn; delegate, E. H. Rogers; Alternate, T. H. Hay.

## ST. CROIX COUNTY MEDICAL SOCIETY.

The annual Meeting was held in Hudson and after listening to the President's address and to many interesting clinical recitals a banquet and smoker was held.

The next meeting is at Hudson, February 23rd, then April 16th at Hudson, June 18th at New Richmond, August 20th at Hammond, October 15th at Deer Park, December 17th at Hudson.

The Secretary was requested to notify the Secretary of the State Medical Society of Wisconsin that the State Society must not accept as members men who do not belong to the County Society, and to call the attention of the Secretary to Article 1 of chapter 1 of the By-laws of County Societies.

W. H. BANKS, M. D., *Secretary.*

## WAUKESHA COUNTY MEDICAL SOCIETY.

The Waukesha County Medical Society held a meeting on February 6th, at Dr. B. M. Caples Sanitarium, Waukesha.

Meeting was called to order by the president, Dr. R. E. Davis. Nineteen members present. Dr. M. P. Ravenel of the State Hygienic Laboratory, University of Wisconsin, favored the Society with an instructive address on *Vaccine Therapy.*

Following the meeting a banquet was served and a vote of thanks extended to Dr. and Mrs. Caples for their reception to the Society.

SARA T. ELLIOTT, M. D., *Secretary.*

## FOX RIVER VALLEY MEDICAL ASSOCIATION.

About thirty-five to forty physicians attended the annual meeting of the Fox River Valley Medical Society which was held at Appleton on February 2nd.

The following officers were elected for the year: President, Dr. B. T. Phillips, Menominee, Mich.; first vice-president, Dr. F. Gregory Connell, second vice-president, Dr. Gordon Todd, Neenah; secretary-treasurer, Dr. W. W. Kelly, Green Bay.

After the meeting a banquet was served at which the members were entertained with a number of readings by Prof. John Seaman Garns, dean of the Lawrence School of Expression.

The next meeting of the Society will be held at Oshkosh in May.

## MILWAUKEE PHYSICIANS ASSOCIATION.

The Milwaukee Physicians' Association at a meeting held on January 15th, elected the following officers: President, A. R. F. Grob; vice-president, H. H. Rice; treasurer, W. V. Nelson; secretary, A. A. Cooper; directors, H. S. Roby, B. O. Nobles, P. Langland.

## NINTH COUNCILOR DISTRICT MEDICAL SOCIETY.

The Ninth Councilor District Medical Society met at the Mansion House, Marshfield, January 31, and the thirty members in attendance enjoyed an elaborate supper and listened with great interest to one of the best programs of the year. Dr. R. P. Potter, Marshfield, acted as toastmaster and papers were read by Dr. A. M. Christofferson, Colby; J. D. Lindores, Stevens Point and Dr. S. M. White of the University of Minnesota. Music was furnished for the banquet and the table decorations were worth noting.

## OSHKOSH MEDICAL CLUB.

The Oshkosh Medical Club was entertained on February 7th at the Northern Hospital for the Insane by Superintendent Sherman. It was a semi-monthly meeting and about eighteen physicians were present.

The discussion of the evening dealt with different forms of insanity, Dr. Sherman and his staff presenting the subject. Several clinical cases were exhibited.

## THE ASSOCIATION OF COUNTY SECRETARIES AND STATE OFFICERS OF THE STATE MEDICAL SOCIETY OF WISCONSIN.

W. F. ZIERATH, M. D., Sheboygan
President.

M. V. DEWIRE, M. D., Sharon
Vice-President.

ROCK SLEYSTER, M. D. Waupun, Secretary.

NEXT ANNUAL SESSION, WAUSAU, 1912.

**Under this heading will be published each month, papers, editorials, sermons, reports of meetings and all that relates to the County Medical Societies of the state. To it all are invited and asked to contribute, especially the County Secretary. It is yours—make good use of it, and may it be of help to every County Society. It will be edited by Rock Sleyster of Waupun, secretary of the new association, to whom all communications for this department, reports of meetings and news matter should be addressed.**

## BOOSTER SERMON.

Scarcely three months remain before the next meeting of the State Medical Society. It is three months of ceaseless work for the county secretary. The entire membership must be whipped into line before that time. Jones has a grouch. Brown hasn't been to a meeting the past year. Smith is indifferent and pays no attention to a statement for his dues. The Secretary must be diplomat, peacemaker, booster, collector and business manager. He must annoint Jones with the oil of good-fellowship, he must stimulate Brown with ginger tea, and he must woo Smith with all the ardor of a Romeo.

Here's to you Sir County Secretary! And here's to nineteen-twelve! May your supply of patience hold out to the end! Use "Boosterine" and dont take life too seriously for they tell us we'll never get out of it alive anyway! Have you any "heathens" left? Write me their names if I can help.

Now about the coming Secretaries meeting. We want you to be interested. I wish every secretary would write me all that he thinks this meeting should be. What would be good subjects to have papers written on? Will you take a part in the program? What more can be accomplished along new lines to benefit the county society? Light a big black one and think it over! We are hungry for ideas!

COLLECTIONS.

The most troublesome trouble of all the secretary's troubles, the veritable nightmare of a secretary's official existence is the collection of dues. It isn't right to make him dun, and dun, and dun; to petition, and tease, and tease, beg and implore the men to do their ordinary duty to a society in which they are just as much interested as he is himself. It isn't right but it must be done year after year and it is the most successful secretary who does it with the best results and the least trouble. No better use could be made of a portion of this page each month than to publish the ways and means used by the successful ones. Please send them in! Both from observation and personal experience I am fully convinced that it takes a woman to do the trick artistic of extracting the shekels from inside pockets. Listen to this—the 1912 appeal of Dr. M. B. Glasier, Secretary of the Grant County Society.

"Dear Doctor: When you turn from pills
To prayerfully peruse your bills,
Remember, when you see my name,
My bill is always just the same:—
Four dollars:—two for county fun,
Two more to make the presses run,
And keep the order moving great
From way down here to way up state.
Dig up, right now, and then you'll find
The subject doesn't slip your mind,
And cause reminders strong from me—
Does this affright you? Now, we'll see.

---

A happy year for thine and thee,
From mine and me. Fraternally,
*M. B. Glasier.*"

---

## BOOK REVIEWS.

---

**The Ocular Changes in Diseases of the Brain.** UHTHOFF, W., Breslau. Graefe-Saemisch. Handbuch der gesamten Augenheilkunde. 2nd, entirely new edition. Nos. 205 to 210, from page 889 to 1328, with 57 figures in the text and 3 colored plates. Leipzig. WILHELM ENGELMANN., 1911. Subscription M. 12, $3.00.

The subject is divided into II chapters: on the ocular changes in hyperemia and anemia of the brain, hemorrhages, softening, general sclerosis of the cerebral arteries, syphilis of the central nervous system, tumors of the brain and cerebellum, aneurysms of the basal arteries, pseudotumor, affections of the hypophysis and acromegaly. In each chapter the ocular changes are described in the following order: Visual disturbances and ophthalmoscopic changes, affections of motility, conjugate deviation, palsies of the ocular nerves, condition of the pupils.

U. calls attention to the uncertainty of ophtholmoscopic symptoms of hyperemia and anemia of the brain and the fallacy, proven long ago, of drawing conclusions from the ophthalmoscopic picture as to the circulation of the brain. An abnormal redness of the disc, even the aspect of optic neuritis with ill-defined borders, may occur as congenital anomaly and have no significance whatever. On the other hand, the occurrence of certain optical irritations, as flickering, obscurations, nystagmus, affections of the pupils, in hyperemia of the brain cannot be doubted.

The special cerebral symptoms in hemorrhages and softening from embolism and thrombosis and their differential diagnostic relations are given according to the instructive tables of von Monakow. In order to gain a reliable survey over the eye symptoms in apoplexy and softening, and for discriminating both, only cases were considered which had been controlled by autopsies and of those only in which ocular symptoms were mentioned and appeared sufficiently accurate, in all 107 autopsies of apoplexy and 368 of softening.

For illustration of the frequency of ocular symptoms in hemorrhage and softening of the brain, U. supplemented the first statistics by a second one of his personal clinical experiences, gathered during many years, on cases which he examineed in hospitals, asylums for insane, etc., and of which he kept records. Both are presented in tabular form and then discussed in detail.

The author especially emphasizes the importance of sharply discriminating between optic neuritis and papillitis (choked disc) in the sense of A. von Graefe, postulating for papillitis a prominence of 2 D=2-3 mm., and more, with peculiar clinical phenomena as periodical obscurations, concentric contraction of the visual field, not rarely relatively long preserved function in spite of marked ophthalmoscopic changes, possibility of complete subsidence without leaving ophthalmoscopic alterations, etc. A brief history of the pathogenesis of choked disc and its ophthalmoscopic aspects and the surgical operations for its relief with the views of the author are given in the chapter on tumors of the brain. In U.'s observations generally from one to two weeks elapsed after the operation before a decided recession could be ascertained. In one of his cases, operated on by Prof. Küttner, an almost total amaurosis with marked incipient papillitis yielded to normal vision and normal ophthalmoscopic condition in about twelve days.

U. says that all these experiences undoubtedly speak for the increased intracranial pressure as the foremost etiological factor in the development of choked disc and that the inflammatory changes are to be considered as chiefly secondary from the stasis of blood and lymph with destruction of the

nervous substance without calling for definite toxins as producers of inflammations.

The chapter on ocular symptoms in syphilis of the central nervous system represents a splendid and complete discourse. Since his great essay on this subject in 1894, which was based on 100 cases of syphilis of the brain, with 17 autopsies, U. carefully collected his material and utilized it in the present work, with consideration of the recent diagnostic and therapeutic methods. But also the other chapters give ample proof that the author speaks from a large personal experience combined with original, clinical and anatomical investigations, with critical utilization of literature imparting authoritative value to this admirable work.—C. Zimmermann.

---

**American Practice of Surgery.** Complete in 8 volumes. Edited by Jos. D. Bryant and Albert H. Buck. Vol. V., William Wood & Co., New York.

The fifth volume in the series is devoted to surgery of the head, the subjects being devided as follows: Surgical Affections and Wounds of the Head, by Edward Archibald, Montreal, Canada; Surgery of Cranial Nerves, by Charles H. Frazier, Philadelphia, Pa.; Surgical Diseases, Certain Abnormities, and Wounds of the Face, by Charles G. B. de Nancrede, Ann Arbor, Mich.; Hare Lip and Cleft Palate, by James S. Stone, Boston Mass.; Surgical Diseases and Wounds of the Eye, by George C. Harlan, Philadelphia, Pa.; Surgical Diseases and Wounds of the Ear, by Robert Lewis, Jr., New York City; Sinus Thrombosis of Otitic Origin, and Suppurative Disease of the Labyrinth, by John D. Richards, New York City; Pyogenic Diseases of the Brain, of Otitic Origin, by Henry Ottridge Reik, Baltimore, Md.; Surgical Diseases and Wounds of the Pharynx, by Charles H. Knight, New York City; Surgical Diseases and Wounds of the Larynx and Trachea, by James E. Newcomb, New York City; Laryngectomy, by Frank Hartly, New York City.

Under fractures of the skull the writer presents a very readable and interesting account of the mechanics of the various forms of fractures. Diagnosis, and especially indications for operation are clearly outlined. The chapter on compression of the brain is very lucid and contains numerous case histories. The treatment is based on sound physiological principles, and deserves careful reading. Under intracranial hemorrhage in the new born, the author emphasizes the futility of purely medical treatment, urging early surgical intervention and quoting Cushing's favorable results in this otherwise hopeless condition in which the late paralyses are so distressing. The chapter on localization of cerebral function will prove very interesting reading, and is supplied with several very useful diagrams. Chapters on technique and cranio-cerebral topography are excellent, and also contain many valuable illustrations and diagrams. The remaining sections in this volume, devoted as they are to the various specialties, eye, ear, nose and throat, etc., seem to be very complete and will appeal most to those interested in these particular fields. Altogether, the volume is a very creditable one, deserving wide recognition.

**Physical Optics.** Wood, Robert W., Prof. of Experimental Physics in Johns Hopkins University. New and revised edition, The Macmillan Co., 66 5th Ave., New York, 1911. Cloth, $5.25, net.

The first edition of this important work appeared in 1895. As the author says in the preface, the rapid advances made in the science of Physical Optics since then, have made additions necessary in practically every chapter. Certain sections of small interest or importance, mostly mathematical, have been removed bodily to make room for new material. By this and the addition of three new chapters on meteorological optics, electro-optics, and the principle of relativity, the new edition has been increased in size by about 150 pages and nearly 100 new illustrations. The author, being foremost an experimentalist, special stress has been laid on the experimental side, and the numerous additions and enlargements deal almost exclusively with the experimental side of the subject. Here the directions are given concisely, but in sufficient detail to enable the reader to repeat the experiments for himself. This becomes at once apparent in the first, very interesting chapter on the nature of light, with a short historical review, where an excellent summary of the sources of light for experimental purposes is offered.

As the refraction and diffraction of light by water drops, ice crystals, dust particles, etc., in the earth's atmosphere, give rise to a great variety of optical phenomena, the study of which is of help in determining the atmospheric conditions producing them, a new chapter has been devoted to meteorological optics. Here a new investigation of the extremely complicated problem of the rainbow is presented, the elementary explanations by Descartes (1637) being wholly inadequate. Further on, the halos, mock suns and related phenomena are dealt with.

The last, also new, chapter contains an exposition of the principle of relativity, first definitely formulated by Einstein, who "denies the possibility of absolute velocity" (which must be considered possible if we have a substantial medium or ether), and consequently abolishes the ether at the outset. With the disappearance of the ether we are forced to remodel our views concerning light and electro-magnetic waves, which now become a type of energy which propagates itself in an absolute vacuum with a velocity which depends, not upon the physical properties of the space through which it is moving, but upon the properties possessed by the electro-magnetic energy. Light thus seems to be in the nature of something expelled by the source, and Einstein is of the opinion that the next phase of the development of theoretical physics will be the formulation of a new theory of light which will be in the nature of a fusion of the wave-theory with the old corpuscular theory."

The usual subject matter is clearly set forth in twenty-four chapters, in which orientation is greatly facilitated by the heavier print of the headings of the single paragraphs, a table of contents and alphabetical index. The book is a splendid and exhaustive treatise, giving the best possible information on the modern state of physical optics. Its external appearance, paper, print, plates, and binding, is very handsome.—C. Zimmermann.

# THE WISCONSIN MEDICAL JOURNAL

MARCH, 1912.

## ORIGINAL ARTICLES.

### ANOMALOUS RENAL VESSELS CAUSING RENAL COLIC OR SYMPTOMS REFERABLE TO THE APPENDIX OR GALL BLADDER.

A. H. LEVINGS, M. D.,

SURGEON TO ST. JOSEPH'S HOSPITAL,

MILWAUKEE, WISCONSIN.

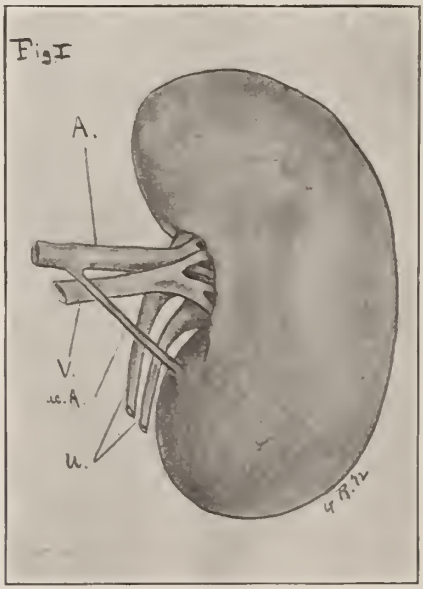
Probably with the majority of physicians, pain occurring in the right side of the abdomen is primarily referred either to the appendix or gall bladder, after this in women to the pelvic organs and but rarely to the kidney.

It is my experience that in a great many cases the cause of the pain is an anomalous renal vessel crossing the ureter and possibly the vein and causing obstruction in one or both. If the vein is pressed upon the kidney will be congested and enlarged and there will be more or less constant pain in the lumbar region or in the right abdomen. If there is obstruction to the urinary outflow there will be severe colic which often simulates and is frequently mistaken for acute appendicitis or gall stone colic. In other cases there will be acute attacks with intense pain lasting for a few hours, to be followed by a heavy, dragging or pretty constant pain in the side, usually in the region of the appendix. This pain is increased by standing, lifting, coughing, straining or walking and relieved to some extent although not always entirely by lying down. The distress often starts in the lumbar region and extends down towards the bladder. In cases of colic there generally is frequency of urination or a frequent desire with inability to empty the bladder.

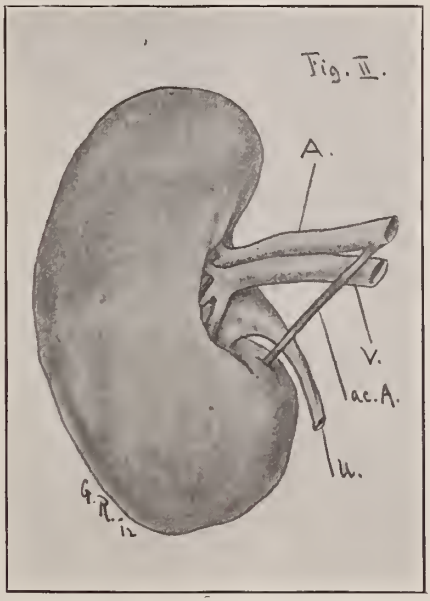
The following four cases occurred in my practice during the past six weeks and during the past year, since my attention has been especially called to the subject, I have operated on twenty or more

cases, each of which had an anomalous renal vessel going to the lower pole and giving a history much the same as has been given by these four patients. There seems to be some direct relationship between an anomalous renal vessel and a loose kidney, as in every case of loose kidney upon which I have operated during the past year, I have found one or more anomalous vessels going to the lower pole. I think perhaps that the increased weight of the kidney incident to its engorgement with blood, the distention of the pelvis with urine, and the spasmodic contractions of the pelvis as the result of this distention might be factors in forcing the kidney loose from its normal position.

Case 1. Mrs. F. Age 34 years; one child, several miscarriages. Two years ago without apparent cause she lost the sight in both eyes. About the same time she commenced to have pain in the region of the stomach and through the abdomen, with frequent vomiting. For five months the pain has been situated in the left side, either radiating from the left lumbar region down towards the bladder, or located in the left lower abdomen. The pain came on suddenly, was spasmodic and intense in character and would continue for two or three days. During these attacks the patient required large doses of morphine, in the intervals there was a dragging, sore pain in the side. The patient was very stout and difficult to examine, kidney could not be palpated, nothing abnormal in the urine. Patient operated on October 26, 1911. Left kidney exposed and a double ureter found across which a large and very tense branch from the renal artery passed to the lower pole of the kidney. The artery was double ligated and divided and the kidney fixed, since which time the patient has been entirely well. Fig. I.

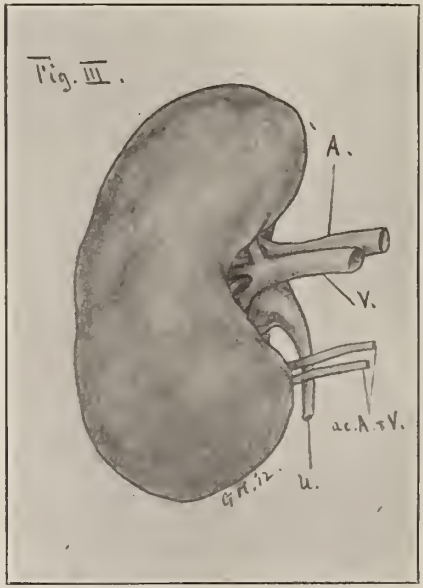


Case 2. Mrs. M. Age 41 years; two children. For two years she has suffered from severe spasmodic pains in the right abdomen. There have been about twelve of these attacks. The pain was usually situated in the right iliac region or below the border of the ribs. The pain required from one-quarter to three-quarters of a grain of morphine for its relief. There was an absence of fever, but nausea and vomiting. The family physician stated that the pain during the attacks was most intense and the patient well nigh distracted. There was no special disturbance of urination, but during the attacks patient felt that she could not urinate; she attributed this to the morphine; between the attacks there was at times frequency of urination. The uterus was retroverted and the right kidney loose. On November 5th, uterus was curetted, abdomen opened, round ligaments shortened and appendix, which was adherent, removed. The right kidney was then exposed and brought into the wound. A branch of the renal artery, larger than a knitting needle was seen to cross the ureter to the lower pole of the kidney. It was drawn tightly across the ureter. The artery was double ligated and divided and the kidney fixed, since which time the patient has had no further disturbance. Fig. II.



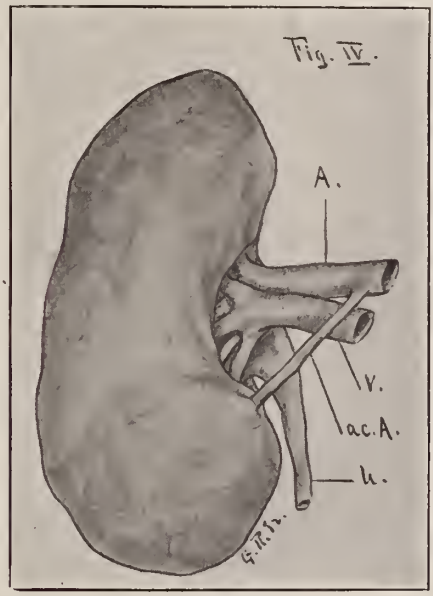

Case 3. Miss L. Age 26 years. Four years ago appendix removed, following acute attack. Two years ago she commenced to experience pain in the right abdomen. This pain was relieved by lying down and increased by being on the feet, as in standing or walking, by lifting, going upstairs, and sweeping. The pain was never spasmodic, not causing nausea or vomiting, but more or less constant; it seldom extended into the lumbar region, but was nearly always in front. The pain finally became so constant and severe that the patient, a Norwegian girl, who was obliged to rely upon her own exertions

for support, was compelled to give up her work. On examining the right side, the kidney was found loose, its upper pole could be forced well down below the border of the ribs, gall bladder non-sensitive. On December 15th, the kidney was exposed by incision, brought into the wound and the fat stripped by gauze pressure from the pelvis. Crossing the ureter just as it left the pelvis and going to the lower pole of the kidney was an artery and vein which were larger than an ordinary knitting needle. The other vessels entered the hilus. The two vessels crossing the ureter seemed to go direct to the aorta and inferior vena cava. They were double ligated and divided, the ends became widely separated, showing that they were under considerable tension. The kidney was then fixed and the wound closed. The patient has had no further disturbances up to the present time. Fig. III.




Case 4. Mrs. H. Age 40 years. Farmer's wife; mother of four children. A year and a half ago she fell backwards from a load of hay, causing severe backache. Patient had enjoyed excellent health until three months ago, when she was taken with very severe pain in the appendiceal region, which confined her to the bed for three days. There was nausea and vomiting. Since the primary attack, she has had three others, but less severe, there has also been constant pain in the intervals. The interval pain was increased by being on the feet and by lifting and seemed to extend from the right lumbar region down towards the iliac fossae. Patient had become very restless and nervous, and scarcely able to do her work; she has also suffered from insomnia. During the attacks, she usually had a desire to urinate, but was not always able to empty the bladder. The cervix was lacerated and the uterus down in the pelvis, menstruation regular, and no complaint of pelvic distress. A diagnosis had been made of appendicitis and probably gall stones.

On December 19th the patient was placed under ether, the uterus curetted and the laceration repaired and united. The abdomen was opened and round ligaments shortened. The appendix was removed, but it had every appearance of being normal. The gall bladder was palpated and found free from stones and adhesions and easily emptied. The abdominal wound was then closed and the right kidney exposed. The kidney was very large, at least one-third to one-half larger than normal. On stripping the pelvis of fat and connective tissue by gauze pressure a branch of the renal artery, of about the size of a knitting needle and surrounded by a cord of connective tissue was seen to cross the ureter just after it left the hilus and enter the lower pole of the kidney. This vessel with the surrounding connective tissue was taut and making pressure both upon the renal vein and ureter. The vessel was double ligated and divided when its ends became widely separated. The connective tissue was also divided and the kidney fixed. The patient has had no return of the previous pain. Fig. IV.




DIAGNOSIS.

I am now quite convinced that the diagnosis of anomalous renal vessels is easy. Of course the condition may be associated with gall stones or appendicitis or pelvic disease but if these conditions can be excluded and especially if there is a loose kidney and the patient gives the symptoms which these patients gave the diagnosis will be practically assured. If the kidney is caught by bi-manual pressure it will give the patient a similar pain to the one from which she has been suffering and she will often say that that is the sore spot or that is

the pain of which she has been complaining. From renal calculi the condition can be differentiated by the X-Ray and by the further fact that in calculi the urine practically always contains either blood or pus often both. Sometimes these patients have acute crises (Dietl's Crises) which are very severe and which continue for two or three days. In these attacks there is intense pain, nausea and vomiting, and often one or more degrees of fever. I believe these symptoms are caused by rotation backwards or descent of the kidneys, in consequence of which the anomalous vessel makes obstructive pressure upon the ureter and often upon the renal vein. This class of cases presents the greatest difficulties in the way of diagnosis and they are frequently mistaken for acute appendicitis or cholelithiasis but in so far as my experience goes the kidney will generally be found loose and often in the appendiceal region, which tissue by its presence it traumatizes. There is scarcely ever much difficulty in differentiating the condition from cholelithiasis, as in the latter the gall bladder is often enlarged and the region tender with perhaps a history of one or more attacks of jaundice.

Quite a number of my patients who have had anomalous renal vessels with colic were operated upon for either appendicitis or gall stones and in each case without relief. The same pain from which the patient suffered before the operation, continued thereafter, in no case however were gall stones found. Following the double ligation and division of the anomalous vessels all patients were relieved. I am very much impressed with the belief that one reason why patients are not more uniformily relieved after an appendectomy or cholecystostomy is that the causative factor often is a loose kidney with an anomalous renal vessel and not a diseased appendix or gall stones.

---

## VAGINAL PTOSIS: SURGICAL TREATMENT.*

BY RALPH ELMERGREEN, M. D.,

MILWAUKEE.

The generic term vaginal ptosis is somewhat unfortunate in its unrestrictiveness. It is impossible to cover in one brief paper the many causes operative in diminishing the unit-strength of the female pelvis.

From all over the medical world there comes a spontaneous demand for more and better reparative work. We must hark back to our early masters—our Sims and Emmets.

*Read at the Sixty-Fifth Annual Meeting of the State Medical Society of Wisconsin, Waukesha, June 9, 1911.

This is the age not only of preventive medicine but also of preventive surgery. "A stitch in time saves nine" is only too true in gynecology. Repair the cervix and you often prevent a prolapsed or even cancerous uterus; repair the perineum and you frequently prevent displacement and rectocele; repair the anterior vaginal wall and you prevent cystocele with its train of neurasthenic symptoms.

It is the latter condition—relaxation of the anterior vaginal wall—that I purpose to emphasize in this paper. I believe that we can permanently benefit our patient suffering from vaginal ptosis by adopting a technic so simple and logical and at the same time so grateful in end-results, that no surgeon need to hesitate in holding out renewed hope to his gynecic neurasthenics.

To those of us that have spent some time in the dissection of the female perineum, the text-books on anatomy offer but little comfort. We look in vain toward Gray, Holden, or even Piersol, for a full and correct description of the structures and anatomic architecture of the female perineum. Thus Gray fills in several pages in describing the male bladder, but he dismisses the female bladder with one short paragraph. Our text-books on surgical anatomy, particularly Deaver's and Thomson's sections in Morris's Anatomy, however, are more complete in the description of the female perineum, and I am much indebted to these able treatises for my work along these lines.

Both the anatomists and the surgeons of to-day are divided in their respective conclusions as to the different factors that keep the internal viscera in place. Is gravity and intra-abdominal pressure overcome by suspension or by support? That is the basic question for the surgeon to consider. It is wholly a mechanical question. Whatever operative technic you may advance for ptosis of the internal viscera or vaginal cystocele must logically square with your mechanical theory as to the normal forces that keep the abdominal organs in place. This might strike you as elementary, and yet you would be shocked were you to review the literature of the operative technic advocated by some surgeons as a cure of cystocele, and compare this with their respective theories of the normal retention forces of the abdominal organs.

If Goffe is correct in his conclusions that the bladder and uterus are held in place by ligaments regardless of all lateral or floor support, then every operative procedure having for its basic principle the strengthening of the lateral and floor support must ultimately fail. Per contra, if displacement of the bladder or uterus is prevented or overcome, either in part or whole, by strengthening the lateral and floor support of these organs then the only rational surgical treat-

ment of cystocele, either with or without decensus uteri, means the anatomic repair of the perineum and the physiologic repair of the anterior vaginal wall.

Our foremost anatomists including Tandler as well as the late Zuckerkandl, have repeatedly warned the surgeon against suspension or permanent fixation in dealing with displaced internal organs. We know that the fixed organ, be it the kidney, the omentum, the uterus or the bladder, is not only more subject to the dangers from traumatism, but is also frequently a source of dragging pains.

The whole economic system of the arrangement of the internal organs and the permanency and stability of their location appear to depend on the mutual mobility of all these respective organs. The free, gliding movement of one organ on its nearest neighbor, yes, even the suspension of one movable organ from another movable organ seems to be the rule in the arrangement of the abdominal viscera.

Reasoning from this well-known anatomic arrangement and economic fact, many of our surgeons are inclined toward the belief that suspension alone is sufficient to keep an organ in place; that whenever you have a hernia, a displacement, a prolapse or ptosis of any of the internal organs, the fault lies solely in some defective suspension arrangement. Nor were these surgeons much in the wrong, as the brilliant end-results of Kelly, Wertheim and later Watkins could attest. In my own operation for vaginal hysterectomy, as some of you will perhaps remember, I prevent cystocele by suspending the bladder from the stumps of the broad ligaments by suturing the vesico-uterine septum to these stumps and thus form a new pelvic floor. As you see I make use here of the principle of suspension.

However, neither anatomic suspension nor surgical fixation is always sufficient to keep some organs in place. Lateral and floor support is equally essential in maintaining the relative positions of the abdominal organs. But for the lateral support of the strong abdominal muscles and the non-elastic fascia, general abdominal ptosis or enteroptosis, would be the normal type. And it is equally true that but for the structural arrangement of the female perineum, uterine prolapse, cystocele and rectocele would be considered physiologic instead of pathologic.

Now, while bearing these premises carefully in mind, let us for a moment examine the normal female perineum and ask ourselves why the uterus which can readily be pulled down, yet on the release of the vulsellum resumes its normal anteflexed position high up in the pelvis? And why the rectum and the bladder do not crowd down into the vagina? In other words, let us study anatomy in order to under-

stand pathology. We must understand the normal in order to discern what is abnormal.

The female perineum in the human species is often subject to strains wholly out of proportion to the structural arrangement and unit-strength of the tissues that enter into its formation. We have here a large shifted-square space perforated by three openings and yet constantly subjected to the entire weight of the abdominal viscera to which only too often is added an excess of extra-abdominal pressure.

More than that, the calls of nature frequently subject this perforated lozenge space to a muscular pressure of many pounds to the square inch, while during the second stage of even a normal labor the strain is so enormous that the strong sphincters and inner fibers of the pubo-rectalis and ilio-coccygeus are often ruthlessly torn, the anterior and lateral vaginal walls stretched beyond spontaneous recovery, the deeper fasia severely damaged with a resultant general pelvic ptosis of all the genital and urinary organs. In the animal these conditions do not obtain. True, we have straining and intra-abdominal pressure here the same as in man, but the moment pressure is released the principle of gravity becomes operative and the organs of the animal will resume their normal position, supported by limiting walls that are free from natural perforations.

Had I the time and you the patience and inclination, I could easily satisfy you that there are no inherent defects or points of weakness either organically or structurally, in the female perineum that nature has not abundantly provided for if only the upright position of man could be abandoned for the all-four position. As it is, the esthetics of man's locomotion have outrun the laws of evolution. Man began to walk on his hind legs before the laws of evolution had time properly to adjust his anatomy to the dangers and exigencies of this newly acquired habit. But, as there is no immediate likelihood that man will resume his arboreal manner of living it falls upon the surgeon to remedy as far as possible the disastrous injuries due to traumatism, straining, and posture to which the female perineum is hourly subjected.

There are only a few of the structures that fill the outlet of the female pelvis that the surgeon must consider in looking for the causes and proper remedy of cystocele. All the soft structures may be dismissed as you can not support the bladder with mucous membrane or skin, nor, in the absence of good support, permanently suspend it by attaching it to another mobile organ.

The three openings of the female perineum are enclosed by

sphincter muscles. Back of the sphincter muscles of the vagina and rectum lies the perineal body which is one of the most important structures in maintaining the integrity of the perineum. The perineal body is a wedgelike mass of fibro-elastic and muscular tissue. The apex radiates from the triangular ligament and the base is extended outward. This mass of strong tissue not only forms a secure cushion for the anterior wall of the vagina to rest upon and thus overcome the tendency to cystocele, but it keeps the rectum in place, and, what is perhaps most important, it diverts the perpendicularity of the vagina and thus prevents prolapse of the uterus. From a study of inguinal hernia you have perhaps arrived at the conclusion that the more oblique a canal is the less danger is there of hernia, and, per contra, the more perpendicular the canal, the greater the danger of hernia. This principle applies with equal force to the slant of the vagina.

The two layers of the triangular ligament blending with the fibrous coat of the vagina toward the front, with the ischio-perineal ligaments on the sides, and with the perineal mass posteriorly, is another important structure that maintains the integrity of the female perineum. White of Savannah demonstrated some years ago that if the fibrous coat of the anterior vaginal wall, or to be more explicit, the white line which laterally supports the bladder, be cut across, the vagina falls down and forms a cystocele independent of the weight of the bladder. Dr. White takes advantage of this anatomic fact in his modified method of anterior colporrhaphy, and claims good results. For us it is sufficient to remember that the perineal body, the sphincters and pubo-rectalis and ilio-coccygeus muscles,—the former loosely playing back and forth on the urogenital trigone,—the two layers of the triangular ligaments, and the anterior fibrous coat of the vagina, are all vital structures in maintaining the integrity and proper anatomic relationship of the pelvic organs.

The support that a fully restored perineum is capable of giving to relaxed and drawn out pelvic ligaments should never be underestimated. I firmly believe that the restoration of the relaxed or torn perineal body, if followed by proper post-operative rest will alone be sufficient in many cases to overcome prolapse, rectocele, and cystocele by giving rest to the weary suspensory ligaments, and permitting them to recover their former integrity and resiliency.

The factors that enter into the causes of cystocele were carefully touched upon in my review of the anatomy of the pelvis. But let me emphasize this fact: An organ so loosely attached to surrounding tissue as is the urinary bladder, and daily subjected to great

variations in size cannot maintain its own relative position when deprived of the support of the surrounding organs.

The diagnosis needs only be mentioned here. Vaginal cystocele can not be mistaken for any other condition. Dr. Henry O. Marcy, however, draws a distinction between vaginal cystocele and vaginal hernia by limiting the former to a simple relaxation of the anterior vaginal wall, and using the latter term only when there is present a rupture of any portion of the strong fascia of the upper perineum. To my mind this is a distinction of degree only and should be dropped.

The symptoms are so well known to the suffering patient and attending physician that they need only to be recapitulated here. At first there is difficulty and moderate pain in some instances in passing water. There is presently an inability to empty the bladder completely owing to the mechanical fact that the base, forming, as it does, the cystocele pouch is so much lower than the external meatus. This defect gives rise to decomposition of the residual urine, which in turn causes the frequency of urination, vesical tenesmus, cystitis, and in a few instances adhesions may form in the pelvic peritoneum surrounding the bladder which makes its replacement very difficult.

Not so very many years ago Ahlfelt told us that the permanent cure of cystocele still remained an unsolved problem in plastic gynecology. Since then many plastic operations for vaginal hernia have been devised, all more or less dependent on the originator's different ideas of the normal axes of the vagina and bladder, and of the anatomy and physiology of the female perineum. It may perhaps surprise you to hear that Paul Numbe once wrote that all his operations for cystocele ended in failure and that he had abandoned operating for such conditions. Statements like these coming from well-known gynecologists undoubtedly delayed any material progress in the operative technic of plastic gynecic work.

Geardin in 1823 was the first surgeon that proposed the denudation of the anterior wall of the vagina and subsequent suturing of the edges for the purpose of lessening the caliber of the vagina. Dieffenbach, a few years later put this theory into practice and was successful with a lateral elytrorrhapy. A quarter of a century later J. Marion Sims rediscovered this early pioneer plastic work and became moderately successful in effecting permanent cures in many cases of cystocele. Both Sims and Emmet worked along the lines of lessening the caliber of the vagina only.

In 1889 Hodra of Texas published his article on Vaginal Prolapse and Cystocele in the American Journal of Obstetrics. Hodra's

technic practically opened a new field in plastic gynecology. It was simple and efficient, and his results were permanent. He incised the anterior vaginal wall from the meatus of the urethra to the cervix, detached the bladder from the uterus in the front and from the vagina laterally, and then sutured the anterior vaginal wall to the anterior portion of the cervix. Saenger soon after adopted Hodra's principle, also with good success. Later Duhressen and Goffe and Stone of Washington did much good work along this line, all depending more or less for their success on the fixation of the anterior vaginal wall to the uterus. Watkins, Mackenrodt, and many of our younger gynecologists have extended the Hodra principle to serve them in cases of severe prolapse of the uterus with cystocele. Their technic lies in entering the peritoneal cavity anteriorly to the cervix, bringing the fundus of the uterus forward, burying it in the anterior wall of the vagina, and thus reversing the normal anatomy by having the uterus lie below the bladder serving as a cushion for the bladder.

My success in bringing permanent relief to patients suffering from cystocele with general fullness of the vagina and prolapse of the vaginal walls has been so uniform and gratifying that I must beg of you not to permit my frankness and apparent egotism to influence you adversely in studying and adopting these methods.

No plastic operation on the female perineum or anterior wall of the bladder should ever be out of proportion in technical difficulty or in the infliction of traumatism to the remote dangers and physical discomforts caused by the malady. We should always adopt our plastic work in the female perineum and pelvic organs to the anatomic or pathologic variations from the normal.

In women that have born no children and suffered no other traumatism to the perineum, the small, soft tumor filling the anterior orifice of the vagina only needs our attention. This tumor is a pouch of the base of the bladder due to a relaxation of the elastic coat of the anterior vaginal wall. Very frequently there is no accompanying prolapse of the uterus in these cases. The inability to empty the bladder completely and the decomposition of the residual urine make chronic invalids out of many of these sufferers. The cure in these cases is wholly based on mechanical principles, and the relief is uniformly grateful in end-results.

*Technic.* Prepare your patient as for vaginal hysterectomy. Place her in the extreme lithotomy position. By means of four guiding points deeply denude an oval space over the presenting cystocele. Keep a sound in the bladder and thus avoid injury to that organ. Make your denudation deep enough to reach the strong elastic coat.

Bring the edges together in a horizontal line with chromicized cat-gut sutures. In introducing the sutures pick up a little of the denuded space to avoid dead space under the line of sutures. The Stoltz purse-string suture, while possessing no advantages over the horizontal suture, tends to pucker the base of the bladder, and for that reason I shall discard it.

In cystocele of the second degree generally due to child-birth, you have a laceration of the perineum more or less complete, relaxation of the supports above, with a tear of the strong fascia of the anterior vaginal wall. In addition you have a large somewhat prolapsed uterus with perhaps a torn cervix. What is your technic here? Do you believe with Goffe and Stone in opening the abdomen from above to shorten the utero-sacral ligaments, and then go in from below and free the bladder from the uterus and sew the anterior wall of the vagina to the front of the uterus? I do not. Nor do I think that these major operative procedures are at all necessary to effect a cure. A laparotomy combined with extensive vaginal denudation necessitating many stitches may have possible results wholly unwarranted in a simple reparative operation. It is often necessary to enter the peritoneum both from above and from below in order to remove a malignant tumor but I am unable to persuade myself that we should resort to this technic in our plastic gynecic work.

My operative procedure for the relief of these patients is simple, and invariably successful. Very poor patients without the means of hospital care, or those suffering from unwarranted fears of the hospital, I have frequently operated on at their homes with good success. I prepare the patient as mentioned above and place her in the same position. By liberally cutting away all cicatricial tissue I repair the cervix, reducing it to its normal size. In some instances my repair here amounts to a virtual amputation of the cervix. Curettement as a preliminary measure is seldom necessary as the subinvoluted uterus will take care of itself once you remove the cause. The torn perineal mass with edges retracted, is next repaired by a deep V-incision and subsequent horizontal suture. No tissue is removed. If sphincters are torn the ends are found and brought together. It is not absolutely necessary that you bring the layers of the deep tissue together in their anatomic order, but it is of the utmost importance that you restore the thick wedgeshaped perineal mass to its former structural shape—the wedge with the base downward. You cannot do this by making a denudation perineorrhaphy, but you always succeed in doing this by the V-incision method. The venous bleeding here often compels you to use deep buried sutures, although I always recognize this

as a great handicap, as, in spite of every care you will sometimes get suppuration in this region. Use through and through silk-worm gut sutures—picking up the layers one by one—skin, fascia, muscles, and perineal body—whenever you can do this. Lightly pack the vagina and seal the line of sutures with a collodion dressing. Finish your plastic work by an anterior colporrhaphy as described above, and put your patient to bed. Permit her to pass water in the knee-chest position after two or three days of catheterization.

Now, what do you do when you repair the perineum. You not only give support—good substantial support at that—to the anterior wall of the vagina, now restored to its normal integrity, but, what is even more important, you restore the normal slant to the vagina. The erstwhile perpendicular hollow tube, so to speak, with an enormous cervix threatening to glide downward tearing the anterior wall of the vagina and bladder down with it, is now, as if by magic, transformed into a collapsed, oblique canal, with narrowed external orifice, well supporting walls, with a bladder comfortably resting on a strong anterior vaginal wall which, in turn, snugly rests on the now fully restored perineal wedge. The enlarged uterus which before the operation threatened to shoot downward is now fast resuming a normal tonicity, of normal weight, comfortably gliding on its long axis crossing the axis of the vagina, meeting with good substantial support both of the anterior and posterior walls of the vagina. This vicarious mechanical support is quite sufficient to assist the tired, relaxed broad, utero-sacral and round ligaments and permit the utero-bladder-suspension economy to resume its normal integrity. These are not empty words but grateful facts for which many former invalids are thankful to-day. There is nothing new in my technic but the faith in my work and my firm conviction that any of you can get equally good results by bearing in mind the mechanical principles on which the structural anatomy of the female perineum and pelvic organs is planned.

It still remains for me to consider the surgical treatment of cystocele of the third degree, with complete procidentia, relaxed vaginal walls and rectocele. I have only seen such cases in women past the child-bearing period. Here I remove the uterus per vaginam as I would a tumor or foreign body. This organ is absolutely useless in these cases, serving no economic purpose. Moreover, it is not infrequently subject to erosion, senile hyperplasia and even malignant disease. The elderly patient is better off without this organ and to my mind it is foolish to fix it into the anterior vaginal wall, which requires a technic far more difficult than its removal. After remov-

ing the prolapsed uterus here, I suture the utero-vesical septum to the stumps of the broad ligaments, thus securing a sound pelvic floor.

I finish the operation by correcting the relaxed posterior wall of the vagina and the rectocele by my V-incision perineorraphy as described above.

**Discussion.**

Dr. W. F. Malone, Milwaukee: I have nothing but praise and commendation of the paper. I consider it a timely paper to present to the society, not only in that it is interesting to the surgeon, but it should prove vastly more interesting to the obstetrician and the general practitioner.

What Dr. Elmergreen has designated as vaginal ptosis, or what is usually understood as the relaxation of the vulvo-vaginal outlet, we all know in the vast majority of cases is due to injury to the vagina during parturition. Therefore it behooves every man practising obstetrics to use the greatest pains in detecting a laceration. We cannot blame the obstetrician or the practitioner for the laceration, but to fail to recognize that laceration is what causes the mischief.

Any operation that Dr. Elmergreen or any of us may devise or champion for the repair of the vulvo-vaginal outlet which is greatly dilated or prolapsed, is at best a poor excuse for the immediate repair of the perineum. We frequently hear doctors say in conversation: "Well, I rarely have laceration; it is very rare in my obstetrical practice that I have laceration." As a matter of fact, when we hear a man say that, it means that he has not found it, and very often he does not know where to look for it. As a matter of fact, we are all quick to recognize a slight laceration external to the perineal body, but we fail to explore or recognize what is infinitely more serious for the future, namely, the internal laceration of the vaginal mucosa, and the tears of the levator ani muscle. The quicker we get away from the idea that the vulvo-vaginal outlet is closed by the perineal body—as I understood the essayist to say—a wedge-shaped piece of tissue like a cork plugging a bottle—the better. The mistaken belief that the perineal body has to do with the closure of the vulvo-vaginal outlet has given rise to a great many crude and absolutely unnecessary operations.

Now, what we have to do is to examine the vulvo-vaginal outlet. We notice that it is a very narrow outlet, one and a half or two inches in diameter, as a rule, pressed up, as low as the anus, closely under the pubic arch. Now then, passing the index finger into the vagina, what do we come in contact with? Anteriorly the pubic arch; posteriorly, what? We come in contact with a broad, rounding, resilient muscular band of fibers, extending clear around posteriorly to the rectum, lifting and pressing the rectum and the vaginal outlet up against the pubic arch.

Now, therefore, we can tell that it is not the perineal body, but the levator ani muscles that have to do with the closure of the vulvo-vaginal outlet.

To illustrate, let us examine and search for the perineal body with one index finger in the vagina and the other in the rectum; and let us just

estimate and palpate bilaterally. We can do so easily. What are the dimensions and the thickness of the perineal body? It is a very small affair and absolutely incapable in itself of supporting the superjacent structures. But when we stop to think a little of the anatomy of the levator ani muscle, we note its attachment to the inner surface of the pubic arch, or the pubic ramus on either side, extending laterally around the vagina and adjoining its fellow posterior to the rectum, and see how intimately those fibers are connected with the lateral surfaces of the rectum, and then by a contraction of the muscle how it lifts the vagina and anus forward to the pubic arch.

I do not care what the technic of a posterior colporrhaphy may be, or an anterior colporrhaphy, I believe it requires more actual dexterity on the part of the surgeon to do a proper posterior or anterior colporrhaphy than it does the majority of our laparotomies. I once heard Howard Kelly say he would grade a surgeon by his ability to do a posterior colporrhaphy correctly. I was pleased to hear Emmet mentioned, because we do not have to get far from him to do a good posterior colporrhaphy. I believe Kelly's modification is as good as any, but that is a matter of opinion. The great thing in doing that operation, whether recent or later, is to make your dissection or denudation in such manner that you actually bring in apposition the retracted ends of the levator ani muscle and fascia as well. If you do that you will have a good result. If you forget the levator ani muscle you invariably have no result.

Now you will find many practitioners who will say: "I repaired the perineum." You will see them take a great long curved needle right after delivery and they will sweep that around, always using external sutures, passing into the skin and coming out of the skin, and catching everything up with that needle. Now, when there are internal lacerations, what result can they get? They will say: "I had good healing, good results." What have you? Simply a union of the mucosa; and what do we find three years afterwards—what Dr. Elmergreen is talking to us about correctly.

What we need today right here in this society is to understand that at the bedside we should all search for and find the fibers of the levator ani and coaptate them as well as the fascia. If you do that they will never come to the general surgeon or the gynecologist known as an operator.

Now, much indeed that Dr. Elmergreen has claimed here today is admirable. There is no criticism of his technic as far as he claims, but we all know if we have done much of this work, that if he takes those cases in the third degree where there is complete prolapse or ptosis of all the pelvic organs, and marked cystocele and rectocele, it is pretty hard to build up a dam there that is going to hold. One surgeon I knew in the past in Milwaukee, as good a surgeon as Wisconsin will ever know, to operate seven times on one of those cases. He was able to do as good an anterior or posterior colporrhaphy as any of us can hope to do; and he failed seven times on one patient. It was before the time of our indifference in opening the abdomen. We all recognize now there is no risk, and if the only argument against the operation is simply the risk of the laparotomy it is no risk at all. It is much more risky to subject an aged woman to long anesthesia to do extended plastic work. You can open the abdomen and do work quicker than you can do an extended anterior and posterior colporrhaphy.

It is absurd and useless (I will agree with Dr. Elmergreen), to expect any satisfactory result by simply anchoring a little tissue after the menopause, with no thought of repairing the anterior or posterior vaginal wall. But I have yet to see a case, no matter how far advanced, that we cannot operate upon successfully by an extensive dissection after Kelly's method, for we can find at least remnants of the levator ani muscle and an abundance of fascia to bring forward and establish a good serviceable bridge and a good support that will lift the vagina and the posterior rectum forward and effectually close the vulvo-vaginal outlet.

Dr. Ralph Elmergreen (Closing): If my paper and my work holds out anything new to you it is only because you have so kindly followed me, or perhaps independently arrived at the conclusion with me that we must do more and better reparative gynecic work if we wish to avoid further responsibility for unnecessary major surgical work. I claim little credit for rediscovery or improved technic. However, I recognize and emphasize the great importance of a mechanical knowledge of the female pelvis on the part of the surgeon who aspires to do successful reparative work. The restoration of the normal slant of the vagina is the all-essential principle on the faithful observance of which depend your end results. Divert the perpendicularity of the vaginal axis by any permanent operation you may choose, and success will follow your work.

I am thankful to Dr. Malone for his kind words and encouragement, but I cannot recognize his limitations to the legitimate field of our technic. Barring suppuration, which I rarely get of late years since I discarded the buried sutures, there can be no failure if the proper technic is employed and careful after treatment is followed up.

As I stated in my paper, and as Dr. Malone again emphasized, you can cure a prolapsed or displaced uterus and bladder by going in from above. But why should we subject a patient to a laparotomy which is always a serious operation, when in nearly all these cases good mechanical repair work will cure your patients.

We should remember that an operation should never exceed in difficulty or in remote sequelae the dangers of the maladies for which that operation was performed.

Once get it in your head that by building up the anterior and posterior vaginal walls you permanently restore the normal slant of the vagina and thus mechanically overcome vaginal ptosis—once become clear in this and your technic will follow your anatomic principles and bring you grateful results.

# OCULAR MANIFESTATIONS OF HYSTERIA.*

BY D. F. HARBRIDGE, M. D.,

PHILADELPHIA.

Hysteria in its manifestations permeates every branch of medicine. The literature on the subject is enormous. The very earliest history of medicine contains references to this condition. To formulate a definition covering its entirety is well nigh impossible. However that given by Mobius seems concise yet comprehensive. He defines hysteria as a state in which ideas control the body and produce morbid changes in its functions.

Vesalius, Sydenham, Brisquet and later Charcot, Mitchell, Mills, and Hughlings Jackson have all written extensively on its general manifestations. The latter perhaps more particularly in relation to hystero-epelipsy. Hocken, Harlan, Risley, Galszowski, Schweigger, Stephenson, and deSchweinitz have written on the ocular manifestations. Parker, Ward, Holden and Shumway have all arranged certain classifications and reported some very interesting phases of this condition.

Probably the earliest reference of this condition in relation to the eye was made by Truka in 1781. He refers to "Historea Amauroseos" being fugaceous in character and attacking those of a hypochrondriacal diathesis.

Dr. Hocken, member of the Royal College of Surgeons, London, was perhaps the first to make a comprehensive study of the ocular complications of this condition. He published in 1842 a very interesting book of thirty pages in which he presents deductions based solely upon his own personal experiences. As we know, the origin of the term hysteria was due to the belief that the condition was wholly dependent upon some disturbance of the female reproductive organs. It is interesting to note that Dr. Hocken did not fully share this view. He states, "although we usually find either the uterine or digestive functions deranged or depraved in hysterical females either of them predisposing to or calling the symptoms into active play, yet neither of them are necessary to its existence. The local irritation, whether abdominal or uterine bears no other relation to it than as an excitant." He believed hysteria to be purely a local condition of the organ involved. He remarks: "amaurosis is strictly a local hysterical affection as rheumatism may be confined to one part and being a local manifestation of a general disease." He refers to hysterical

*Read at the January, 1912 Meeting, Wills Hospital Ophthalmic Society.

amaurosis as a condition due to retinitis. It must be remembered that these observations were made in preophthalmoscopic days.

In 1863, some twenty years later, Dr. Harlan wrote a paper on the ocular manifestations of hysteria which may be found in the Transactions of the College of Physicians of that year. In this paper he states that hysterical blindness may be found in those who deliberately simulate, those who unconsciously simulate but are capable of conscious vision, and those in whom really transient absolute blindness exists. He referred to the famous Polyclinic case in which he elicited at different times diplopia, amaurosis, dilated pupil, central scotoma, blephrospasm and conjunctivitis. These conditions as they presented themselves were promptly cured by the application of a wooden magnet.

Risley in 1873, in the Transactions of the Polyclinic in discussing a case stated that feeble innervation of the hysterical patient was liable to diminish range of accommodation and power of convergence, rendering comfortable use of the eyes impossible and also the feeble or deranged circulation in hysterical individuals might set up a group of symptoms in the eye presenting many of the characteristics of serious disease which were however not simulated but were in fact a relative glaucoma; while there was no absolute increase of intra-ocular tension, the normal tension of the eyeball was sufficient to interrupt the entrance of the feeble blood stream.

Bernheim believes that ocular manifestations of hysteria are due to an illusion of the mind. Charcot states that it is a sensory anesthesia. Ward Holden believes that the ocular symptoms are due to fatigue of the peripheral parts—the perceptive power of the retina, etc., whereas deSchweinitz and Mitchell believe the symptoms to be due to a functional disturbance of the cortical centers—not due to failure of the retina to appreciate.

Whatever the true pathology may be no definite post mortem changes have been reported as being definitely associated with this condition.

Mills states that while certain spinal cord changes have been demonstrated, they have been due to one of two conditions; either they are coincident or they are changes wrought as the result of profound hysteria and are not the cause. He describes the general malady as being either profound or of a fugacious type.

The ocular manifestations are varied and difficult to classify. They may however be arranged as those symptoms connected with 1, the visual function of the eye; 2, the muscular apparatus; 3, abnormalities of sensation; 4, of secretion; 5, or of subjective sensations.

The disturbance of the visual function may assume the form of an amaurosis of one or both eyes, or amblyopia of greater or less degree; loss of color perception or disturbed relation in the color field; form may or may not be altered while the colors may show a complete reversal or interlacing; hemianopsia may be present but not as a permanent defect. Abnormal proportions of an object observed by the patient may occur.

The muscular disturbance may be due to spasmodic contraction or relaxation. It may affect internal parts, presenting either dilatation or contraction of the pupil or disturbance of the accommodative power. Or it may affect the extra-ocular apparatus, inducing various form of squint, nystagmus, or ptosis either spasmodic closure or drooping from relaxation.

Abnormalities of sensation my be the same as in any other part of the body; hypesthesia or anesthesia of the cornea, conjunctiva or surrounding integument.

Disturbance of the secretions may be excessive lacrimation or the contrary, apparent dryness.

Disturbance of sensation may be manifested as ocular pain, photophobia, sandy sensations, distorted images, etc.

Case 1. Miss A., age 30, presented herself for examination on March 26, 1909, complaining of an unusual lacrimation, ocular pain, frontal headache, misty vision and occasional redness of the lid borders. The dull countenance and apparent lack of cheerfulness rather impressed me with the possibility of exaggeration.

V=6/6, the fundi appeared normal, except a slight haziness of the disc outlines. The veins seemed moderately full. Form and color fields were contracted. The color field being at times reversed or interlaced. There was no definite proportionate relationship between form and color field contraction. Under atropia there was present about one dioptre of hyperopia.

At first the aspect of the case perplexed me considerable. Inquiring a little more fully into the family history and personal habits elicited the following: The father and mother being dead, patient resided alone with a maiden aunt considerably older than herself. They were in comfortable circumstances. The patient had no special duties to perform or particular occupation to interest her time and mind. She bad rather given up to a more or less moody existence, inclined to shun entertainment, etc.

The patient did not display any marked anxiety concerning her eyes and was quite willing to accept of any medicinal treatment suggested. I did note, however, that she possessed a very decided aversion to being a house patient in a hospital. Glasses were ordered and she was given minute doses of potassium iodide, bitter tonics, etc., as a placebo, but to no avail; they did not seem to alter her symptoms or change the character of the fields. Finally I insisted that unless the fields improved she would have to undergo hospital treatment; from that time on her fields promptly improved until they attained normal proportions.

Case 2. Miss B., age 19, complained of severe temporal pain, following attacks of binocular blindness. Six or seven years previous to her visit, the patient had an attack at which time she was unable to talk, owing to her inability to move the tongue. There was also a history of frequent "spells" of unconsciousness, but at no time has patient suffered any bodily injury during these attacks. The patient was unemployed, living at home in comfortable circumstances, but not in extravagance. During an attack every wish and whim was catered to by the entire family. Believing each attack would leave the sight seriously impaired, they would rush to her assistance with hot water, ice, smelling salts, etc.

Vision, fundi, reflexes, muscle balance, etc., were normal. Fields, however showed a reversal and interlacing of colors, but full for form. Under atropia the correction was O.D. + s 1.75=cy + .25 x 180 V=6/6; O.S. + s. 2=cy. + .25 x 180 V=6/5.

Glasses were ordered and a placebo in the form of water slightly tinted with pyoktannin was prescribed. The patient was charged to be sure and have glasses frequently adjusted and to instil the medicine one drop in each eye very carefully T. I. D., and also that if she felt an attack "coming on," to immediately instil two additional drops. This was all gone into with the most elaborate detail and with the positive assurance that so long as the instructions were faithfully observed, such a thing as a recurrent attack could not possibly occur. Seven months later the patient ran out of medicine and promptly had an attack. The patient was severely censured for neglecting her treatment, another supply was obtained and she remained free from further attacks during the ensuing three months.

In the meantime the young lady had been admitted to the training school for nurses attached to one of our hospitals, those in authority being wholly unfamiliar with the above history. During the course of her training it came her turn to serve on night duty. Late in the afternoon she began to complain of a severe headache, shortly followed by sudden and apparently complete loss of sight. Sympathetic nurses rushed to her assistance and in great alarm led her out of the ward to a darkened room, where she lay upon a sofa with her head buried in a pillow.

Upon my arrival at the hospital I found the patient's eyelids spasmodically closed, profuse lacrimation, the pupils were rather large (which I ascribed partly to the darkened room), but the irides responded promptly to light stimulus. No fundi changes were made out. The patient had again neglected her medicine, another supply was immediately insisted upon. This was obtained and instilled into the eyes with the positive assurance that sight would immediately return, and that patient would be ready for duty in half an hour. In one hour's time she was in the hospital ward attending to her duties.

Upon two or three subsequent occasions the patient began to feign symptoms of an oncoming attack, but the head nurse being a little chagrined at past experiences, has insisted in a kindly, but firm manner upon the performance of her duties and the symptoms have promptly disappeared.

Case 3 has always been held in doubt by myself as to whether it should be regarded as one of hysteria or of pure fraud. Miss C., age 30, trained nurse.

In 1910 I was hastily summoned to examine the patient for what was looked upon as a case of uremic amaurosis. I was ushered into the best room in the hospital, finding my patient absolutely rigid in bed, with lids tightly closed and a dull, sullen expression of the face. All light was carefully excluded from the room owing to the annoyance it offered by inducing marked lacrimation, and a sense of light flashes. The patient's family had been summoned, and waited in breathless silence for a speedy demise. Attentive nurses were present and on the alert to afford every possible comfort to a fellow worker.

A hasty view of the situation did not appeal to my sympathies—I was skeptical. It was with considerable difficulty I examined the eyes while the patient lay in a semi-recumbent position. The patient was conscious and complained of pain in the kidney, abdominal and thoracic regions. The eyelids were tightly closed. Upon forcibly opening them there was profuse lacrimation. The globes were well rotated up, the sclera being the only portion visible, and all my resourceful, persuasive powers would not bring them down. Finally, the candle with which the examination was made being held too close, I remarked on the danger of a fire, whereupon the patient irresistably turned her eyes to look, and a prompt pupillary reaction was noted. The patient realizing the fact that she had been detected, made no further resistance. Thus being afforded an opportunity for an ophthalmoscopic examination, the fundi were found to be absolutely normal. After considerable urging the patient counted fingers across the room and finally told me the color of my necktie—which happened to have red as the predominant color. Feeling certain that there was no serious eye involvement, all present were informed to that effect. After consultation with the physicians in attendance and a more careful examination of the urine, the patient was speedily dismissed. And (as in the fairy tales) has never been seen in the neighborhood since.

The history which led up to the above climax is as follows: During patient's period of training she was operated upon for appendicitis, subsequently she was operated upon at the German hospital for movable kidney. During her course in training she was in attendance upon a genuine case of uremic amaurosis, in my service.

At the time of the above occurrence the patient was nursing a case of uremia. The day previous she had confided in a few of her sister nurses that she felt very badly and had passed very little urine the previous twenty-four hours. The next morning she dropped a tray which she was carrying and simulated a semi-convulsive seizure. She was put to bed assuming a partially rigid posture, and in due course of time affected almost complete blindness. The patient being a trained nurse she was trusted to submit a specimen of her urine.

Hastily testing with nitric acid contact it gave a ring, on boiling the urine threw down well agglutinated masses of white material, which was assumed to be albumen of a peculiar nature. The patient was treated with all possible speed with anti-uremic remedies. Another test of the urine responded as the former, suspicion being aroused it was proposed to secure a specimen by catherization, which was carried out, two ounces being obtained, which reacted as the former two did. At this point I was called in and my

positive statement regarding the eyes, coupled with the suspicion regarding the urine by the two physicians in attendance, it was decided to watch the patient's every move. The patient retained her urine just as long as possible, hoping for an opportunity to void unnoticed, but at the expiration of twelve hours, physical nature triumphed over the mental. She voided an unusually large quantity into which she attempted to put some egg albumin, when she was detected. The explanation was now clear; she had deliberately deceived all in attendance by placing egg albumin in the urine, even resorting to injecting it into the bladder by means of a medicine tube.

---

## THE BUSINESS SIDE OF PRACTICE.*

BY W. F. ZIERATH, M. D.,

SHEBOYGAN.

Gentlemen: This is a most neglected theme in all our meetings, and yet it is one of the utmost importance inasmuch as the moral and material welfare of the profession, individually and collectively, is directly dependent on proper remuneration for the successful pursuit of the practice of medicine.

The constitution and by-laws of our county societies provide that "at least one meeting each year shall be set apart for a discussion of the business affairs of the profession of the county with a view of adopting the best methods for the guidance of all. In all proper ways the public shall be taught that business methods and prompt collections are essential to the equipment of the modern physician and surgeon and that it suffers even more than the profession when this is not recognized."

That clause is hollow mockery to say the least. We recognize a condition and suggest a remedy, but fail to act accordingly.

How many county societies follow out the suggestion in that clause? Close perusal of the reports of county societies, as given in our Journal, leads me to think that very few societies know of the existence of that clause, or if they do, do not do as specifically directed.

The old saw that "The Doctor is a poor business man" is almost as ancient as the profession itself. In these strenuous times it is more pertinent than ever.

All about us we see the various business enterprises paying particular attention to systematized knowledge of the financial end of their business. No matter how keen the competition and rivalry, here is

---

*Read at the Second Annual Meeting of the Association of County Secretaries and State Officers, Waukesha, June 6, 1911.

common ground on which they meet in harmony. Each is willing to recite his experiences and give his fellows the benefit of his knowledge in that particular department. Trade animosities are laid aside in accomplishing the result of making the business pay, by system. So well developed has become this science of finance that the larger business establishments have a special corps of employees engaged in furthering ways and means of reducing financial waste and expediting the conduct of the business with the least loss and greatest gain. They even have magazines dealing with this subject exclusively. They have learned that the loss, in systematic business methods of the few, jeopardize the interests of all, and that highest development of systematic applied financial science by all business institutions affects every one of them favorably.

What a contrast our profession affords! Six years of experience in general practice has convinced me that most of the poverty in our profession, the decline of professional ethics, the lost of respect and confidence that the profession has sustained in the minds of the laity, professional discord and distrust and the absolute professional unfitness of a large number of our co-workers are due, in a general measure, to the lack of sound business methods in the conduct of our affairs.

Fortunately there are signs of better times coming. Some of our medical schools are creating departments of medical history, jurisprudence, and economics. A few of our magazines are devoting some of their space to the discussion of the business end of the practice of medicine.

We are trying to eradicate the unfit by increasing the entrance requirements to our schools and this is a great step forward. The country does not need more doctors but better ones.

If we as an organization can do anything to hasten the coming time when the practice of medicine will again be restored to the financial position it once had, and fully deserves, we will do something our professional posterity will thank us for. It can be done and it must be done. As an organization it is our duty to ourselves and the public to perfect ourselves in our profession and further the best interest of every one of us in all departments, and of these, the financial should receive its due share of consideration.

With these introductory remarks I want to make a number of suggestions and dilate upon them in the body of this paper taking it up under three main heads:

(1) Earning the money.
(2) Getting it.
(3) Using it.

While much that I shall say will be criticism, the remedy will be indirectly suggested.

Under the head of "Earning the Money" I want to make a plea for a broader conception of our duties and responsibilities as physicians. We ought to give what we get paid for and get paid for what we give. It is presumed that all of us are going to give good medical services and that means, an honest opinion based on a careful examination and an accurate diagnosis, without the thought of the prospective fee influencing our judgment. We should not make the patient's condition seem more grave and serious than it really is. The opinion rendered should be absolutely honest and strictly in accord with our scientific knowledge and findings. This presupposes that each and every one of us is a "good physician". In a recent number of the Journal of the A. M. A., Dr. E. P. Lyon has defined a good physician as "a man of character, who possesses the technical qualifications for accurate observation, properly conducted experimentation, and sound interpretation." Now that seems to be a rather complex definition, but in substance it means simply that a man should be "able to deliver the goods", and not resort to "four-flushing".

If we find ourselves deficient in some particular, it is our business to correct the deficiency, and not presume to do that which we are not fitted to do. A medical man must be an earnest student all his life. Our studies do not end on graduation from a medical school. They just begin.

We ought to devote more of our time to perfecting ourselves as physicians by study, research, and travel, and less in manipulating petty graft schemes to get lodge and contract factory casualty practice and political positions of a pseudo-medical nature; this grafting propensity being much over-developed of late years and the dignity and financial standing of the profession materially injured by it. The actions of a part of our profession in this particular are a reflection on all, and the laity misjudge this to be a general movement along like channels by the whole profession.

Of course all this is merely a manifestation of the unfortunate financial position into which the medical profession has fallen. We have no one to blame for this state of affairs but ourselves.

It is high time that we changed from our position of toleration to one of active opposition.

The financial rewards of the good physician ought to be just as great as those of the prosperous business man or manufacturer. We can make it so if we use our united strength and efforts in that direction. We must eliminate the unfit and try to keep the ratio of

physicians to population at its normal level. There is no need to encourage overcrowding the profession. No young man should be encouraged to enter a medical school unless he is properly qualified to do so, not only as to preliminary training, but morally. I use this last word in a broad sense, meaning that the prospective doctor should have a high conception of the profession he is about to enter and a veneration for its history, its traditions, and its possibilities.

We should discourage everything that tends to cast discredit upon us. Even though I am making a plea for a better financial state of affairs in our ranks, I cannot say anything severe and harsh enough in condemnation of those who are doing all they can to convert our profession from a real profession into a commercialized art.

The greater rewards for surgical work have created a marked tendency for a large number of us to enter the surgical field, even though our qualifications, training, and experience are not such as to entitle us to practice surgery. The result is operations for a fee and not to correct a physical condition. It is wrong to call every old abdominal pain appendicitis and convince the patient that the only thing that will save his life is to be hustled to a hospital and have his appendix removed at $100.00 per. It is wrong to call every obscure neurotic pain in a woman's pelvis "ovaritis" and amputate a generous slice out of this unoffending organ simply because it is thought to be the possible source of trouble, and has a few serous blebs on it which we dignify by calling "cysts".

Unfortunately this is being done right and left today. Doctors must make a living, but I maintain that this state of affairs will tend to make matters worse. Eventually the laity will become aware of the deceit practiced upon them and the attitude of suspicion that many of them now entertain toward operative procedures will become conviction and the profession, and patients more so, suffer directly by it.

We must earn our money honestly. It is our duty as members of an organized profession to discourage by every means in our power, this indiscriminate practice of not using our diagnostic knowledge and technique, but blindly going ahead and doing surgery when no surgical intervention is called for. I do not want to disparage really necessary surgical procedures, (I do surgery myself), but I cannot find words sufficiently strong to condemn the unnecessary operations that are being done so universally by so many ill-equipped men.

The slogan seems to be "Do surgery if you have the nerve. If you haven't, get some one else to do it for you and split the fee."

Much can be said in criticism of slip-shod methods in the practice of internal medicine and obstetrics, but time forbids.

I most emphatically maintain that if we would earn the money, preliminary to getting it, we must render first-class services and that means, that each and every one of us should always strive to be "good doctors". If we render that class of services we are entitled to receive a just remuneration and that within a reasonable time, and without worry and loss of time on our part.

But here, too, we do not emulate the tradesman and manufacturer.

In getting the money we should take cognizance of modern methods of keeping, rendering, and collecting accounts. In this vital particular we, as a class, are singularly defective and antiquated. Our bookkeeping practices are particularly vulnerable to attack.

We should keep our accounts posted in a simple, legal way. The courts have decided time and again that the book that will stand the test of legal scrutiny is the day-book. Every physician ought to keep a day-book, putting down each item successively in plain English with the debits and credits properly arranged. The visiting list with its signs and abbreviations is absolutely useless in court.

A ledger should be kept simply as a matter of orderly convenience and as an aid to the proper and expeditous rendering of accounts. The old style ledger is an obsolete and cumbersome affair involving an immense amount of time in posting accounts, scanning dead and worthless accounts, usually missing those which most need our attention. The card system is better, but eventually becomes cumbersome.

The loose-leaf ledger system is ideal. It is a conserver of time and patience in innumerable ways. Here every account is a live one. It is a comparatively easy task with this system to post accounts and in rendering monthly statements it relieves one of all the drudgery of going over dead and worthless accounts.

We ought to spend a few minutes every evening posting the day's work into the ledger. There is nothing that I know of that will so encourage laxity in payment of accounts, on the part of the patient, when he inquires about his bill, as to be told that "I don't know what the account is. I haven't posted my books for several weeks. I have been so busy, etc."

Vice-versa, if any patient inquires about his account, the presumption is, that he is anxious to settle it. It is due him to have his curiosity gratified as promptly as possible. When he observes that you know exactly what his account is, that you have an up-to-the-

minute memorandum, in black and white, arranged in an orderly systematic way, his respect for you and your methods is wonderfully increased, he is less liable to question the account, and usually pays his bills promptly and gladly!

One ought never to guess at the amount of a bill. The answer may be too much or too little, and, of course, both are bad. You ought to know and know exactly. Whenever I am approached on the street, or anywhere, except in my office and asked by a patient what his account is, I make it a practice to tell him that it is impossible to remember all my accounts or carry a ledger with me, but that I will send him a statement immediately, and I make it a point to do so, with splendid results.

Accounts should be rendered systematically and methodically. People have been educated by tradesmen to receive their bill regularly shortly after the first of the month. It does not give offense. It is expected and oft-times demanded. We ought to emulate this meritorious practice. And right here is our weakest point in collecting accounts. "Hit while the iron is hot!" Send a statement before the patient has forgotten his pain, and how grateful he was because of the faithful and skillful services rendered to him. Send statement as soon as a definite service is regarded as completed. In continued services, send the bill the first of every month. The accounts that patients are not allowed to forget are the ones they pay.

Of course tact must be used and individual cases modified to meet varied circumstances, but this absolute laxity in the rendering of accounts, so prevalent among us, is a thing to be deplored and corrected. If we have earned the money we ought to get it, but the patient is not wholly to blame if we do not do our part in encouraging him to pay promptly.

It is well to keep a record of all services, even charity work. Charity patients are the ones who are least grateful and the experience of many of our professional brethren is, that they are the ones who are prevailed upon by unscrupulous attorneys to bring actions for mal-practice. The record of services may be of the utmost value, to prove that calls were made regularly, and refute the claim that the patient was neglected, simply because the case was a charity one.

Then too, some of our charity cases may, at some future time, become able to pay part or all of the bill, and it is no more than simple justice to ourselves to recall past services to their mind, in case they do not voluntarily do so.

No account should ever be thrown away. In my comparatively brief experience I have several times been able to collect an account

long after it seemed hopeless. I can cite the instance of a man with a family earning less than $60.00 per month, but nevertheless well able to pay his bills, who paid his saloon bill in preference to his doctor's. He refused to pay his bill, but before the bill became outlawed his wife died and his children were taken from him, by due process of law. I immediately had my attorney garnishee his wages and the bill was thereby paid.

And that brings up another phase of collecting accounts. We should be more conversant with the laws concerning the collection of accounts, and not hesitate to take advantage of them. One old practitioner said to me that such legal procedures were like "throwing good money after bad". Personally, I have not found that to be the case, and I don't believe that any one would if he pursued that method carefully and sytematically, using good judgment in the selection of cases.

After an account has run for an unreasonable length of time without any effort to settle it, it is well to write or speak to the debtor, being tactful not to excite his animosity. If the letter is ignored, write one more forcible and state that you will take advantage of your legal right, if the bill is not paid promptly, in full or part. Be dignified but not abusive. Never say that you will resort to this method unless you really intend to do so. "Bluffing" is a bad thing and does more harm than good. If you fail to carry out the threat of legal action, the debtor won't be slow to boast of the way he "called your bluff", and advise others of his stripe to do likewise.

Exactly the contrary, if you say that you will turn the account over to an attorney, if not paid promptly, and do so, usually the receipt of a letter from an attorney impresses the debtor with the fact that you mean business and oftimes brings a prompt settlement.

Strange as it may seem, this method of collecting bad accounts does not create enemies or involve harsh criticism. Debtors who have been forced to pay old accounts may cherish animosity for a time, but eventually they realize the justice of your action and will again, in time, ask for your services. They have learned their lesson and then pay for services, usually as soon as rendered.

People don't advertise the fact that they have been forced to pay their doctor bills, but even if they should, the moral effect on others who are prone to neglect their bills is most wholesome. They either won't call upon you for services, or, when they do, will pay immediately.

The patient whose account is paid promptly and regularly will

retain your services. When you allow his account to run up to a comparatively large amount he usually dispenses with your services and calls in one of your colleagues, and he as a rule receives the same treatment in the end, unless he is a better collector than you are.

The patient whose account is regularly paid is the satisfied patient. The slow pay and the dead-beat is a chronic complainer, and tries to excuse his non-payment of his bill by criticism of the services in one case, or "knocking" the doctor in the other.

As for the habitual dead-beat, let him alone. The financial return from him, even when treated severely, by being compelled to pay in advance, can never, at the most, amount to much. If the other fellow wants him, simply to have the reputation of having a large practice, and the possible advertising it may bring him, let him have him. Very properly, he will get all that he has coming to him in the long run and richly deserves it.

Business associations for physicians are fine things, if properly conducted and if the rules and regulations established are obeyed both in the letter and the spirit. Unfortunately our old enemies, discord, jealousy and distrust, are the undoing of most of them. Before writing anything on this subject, I consulted one of the most prominent and oldest attorneys in my city about these associations. Most all have a delinquent list of one sort or another. In the eyes of the law these are black-lists and illegal. But nevertheless, I believe that if properly safe-guarded against abuse they are proper. Some one must make a complaint to the district attorney, and as few people are going to advertise the fact that they are listed as poor-pays, or dead-beats, and practically no district attorney is going to act voluntarily against such an organization, the danger of legal interference is very remote.

We had such a business association and a delinquent list in my own home some years ago, and it worked splendidly. Slow pay and dead-beats were informed by printed slips attached to bills sent them, that if they did not pay up they would be placed on the list. The results were truly remarkable. Eventually discordant elements disrupted the association and it has been dormant for the past six years, but nevertheless all those who were members of it, unite in saying that it was the best thing we ever had, as a physician's organization.

In my talk with the attorney aforementioned, he stated in substance, that in his professional career, he had a great deal to do with physicians' accounts, in probating estates, etc., and said that he had observed, that the physicians who were successful, financially and professionally, were good collectors. They were the men who were not

rushing about town with a seemingly extensive practice, but on the contrary, were the men who rendered good services and visited in a dignified way that made their services worth paying for, and saw that they were paid for then. Their affairs were always administered in a business like way and professionally, they usually ranked high among the laity and their colleagues.

After mature consideration, I am sincerely convinced that we do too much so-called charity work. A great deal of this is imposition, pure and simple, practiced, not only by individuals, but by so-called charity organizations likewise. Now, I don't want to be construed as making an argument against the rendering of medical services to those unable to pay. Far from it. But I do believe that we ought to exercise more care in the giving of our services, gratis. Most of the so-called charity cases will bear careful investigation. Those who misspend their wages in drink, or fritter away their income foolishly, are not proper subjects for free medical services. We should avoid making paupers. If the community permits a drunkard's family to become objects of charity by having his money pay for saloon licenses, then it is up to the community to pay the doctor for medical services rendered to his family, and not expect us to do it for nothing.

I have repeatedly observed that when people who have received medical services gratis get into legal difficulties, and are forced to pay fines and attorney fees, that their friends and relatives hasten to their financial assistance. If the legal profession, and the civil and criminal code are to receive their financial dues from these people, why not the medical profession? And then we have the fact always staring us in the face, that these charity patients are the least grateful and furnish us with most of the mal-practice suits.

As to the matter of fees. After we have rendered honest, efficient services we are entitled to a remuneration commensurate with the services rendered. There should be no such thing as a flat rate for specific services. Many elements are to be considered in making a charge. The value of the services to an individual, unusual devotion and self-sacrifice on the part of the doctor, the danger to one personally, his family and reputation, in the treatment of cases, are items to be considered. Also special knowledge and skill, and the ability of the patient to pay.

The physician, who through his professional skill and learning, recognizes a serious condition in a patient whose income is $10,000 a year, and by his prompt action and the exercise of his knowledge and skill, saves that patient's life or a long period of pain and incapacity, is entitled to a larger fee than he would be from a patient whose in-

come is only $2,500 a year, conditions otherwise bring the same. The services rendered are financially worth more to the one than the other.

If fee bills are established they should be elastic and allow considerable latitude between minimum and maximum fees and even then, should be merely suggestive.

As to the type of physician who solicits a practice by rendering services for small fees and also will volunteer to do work, especially surgical, for less than a fellow practitioner, I can not say enough in condemnation. He deserves professional ostracism and contempt, and should receive scant courtesy at the hands of his professional brethren. He is converting his profession into a mere trade and richly merits all the contempt that is justly due him.

And now after you have earned your money and gotten it, what are you going to do with it?

Of course, the greater part of it is directly used in supporting your family and maintaining your professional equipment. But what about the surplus, if you are so fortunate to accumulate a little?

I don't believe there is a single doctor present who is not on the "sucker list" of some false mining corporation, plantation association, land company or stock jobbing firm. I haven't invested a penny in any of these schemes, but I am on. My mail is flooded with all sorts of rosy-hued literature concerning these schemes. Why? Because we bite so often and so hard that we are regarded by all these organizations as legitimate game, and the most plastic material to squeeze. Therefore everyone who can append M. D. to his name is regarded as a possible and likely prospect.

Just as we need education in earning and getting the money, so we need systematized knowledge in spending and conserving it. That knowledge is readily available. If we can't get it among ourselves, we can get it from the business profession. It is free and open. So is advice, especially in regard to investing. Our bankers are storehouses of knowledge in that particular. The lay magazines and the trade journals all have their financial columns, not to speak of the daily papers.

Everyone is going to get stung once in a life time, but there is neither rhyme nor reason for the medical profession getting hit repeatedly in the same place, especially as we are the ones who can least stand the blows.

In these modern times there is no excuse for that old joke about the "doctor being a poor business man". Earn your money, collect it, and then if you have any to invest, or "salt down", don't look to Cuba, Mexico, Nevada, or Montana or some other far-away place to

put it into the hands of individuals you don't know. Just look around at home. You know the place and the men. You can watch your capital every day in the year and the men entrusted with it.

We ought to realize that if there is big money to be made in these promotion schemes, that the individuals back of it wouldn't have to come to the man of small savings, with only a few hundred to invest. They could get all they wanted from the capitalists, if their schemes were any good.

We should use our money right. If we earn $3,000 per year, we ought to live on $2,500. No doctor should "blow in" all he gets to "put on a front", with the hope that it will bring him a larger and more lucrative practice. That thing has been tried out innumerable times and almost invariably failed miserably.

The doctor who lives wisely and well, who delivers the goods and gets his money for it, who has money in the bank, gets the practice and don't forget it.

And now what are we going to do about it? Just this. Use our organization for what it was intended for, to help each and every one of us, individually and collectively. It is all right and proper to devote a large part of the time to purely professional and scientific topics, but we should not neglect the business end of our profession.

Let us follow out the suggestion contained in that clause of our by-laws and have a business meeting in our societies occasionally.

**Discussion.**

Dr. H. W. Abraham, Appleton: This is a rattling good paper. It hits the nail squarely on the head, and it hits the doctor right between the eyes.

Dr. C. S. Sheldon, Madison: I think, Mr. President, that this paper should be fully discussed. We are notably and wonderfully careless, it seems to me, in regard to our business relations, and the oftener this matter is called to our attention, the better for us. This matter of rendering our bills promptly and courageously is important. Through cowardice many of us hesitate to render a bill when we should do so, and I admit that I am the chief sinner among you all in that regard, and it is unworthy of our profession. If we have earned the money, and have made a reasonable charge (and no doubt all of us *do* make reasonable charges), we should have no hesitation when the patient calls at the office for the bill in having it made out without any delay. We can usually let our patient know immediately what the charge is, if we choose to do so, but owing to this cowardly feeling we do not want to come to the scratch just at that moment, and we put him off, and think we will send it in the next day. That is a cowardly spirit, unworthy of us, and we should overcome it as much as we can, and I hope to do so along with the rest of you.

The plan suggested of having a business meeting at least once a year

is worthy of most serious consideration. We should be altruistic and benevolent, but we must also remember that we have families to support; nobody else will support them; and to do it successfully ourselves we have got to be business men. We should also be business men in responding promptly to these worthy and unremunerated and hard-working secretaries when they ask us to pay our annual society dues. In many cases no attention whatever is paid to them by the members of the society. This is a part of the business which should be attended to, and a serious part it seems to me. In a general way, I say, let us be business men. As far as outside investments are concerned, it is with shame that I admit the doctor is an easy mark. If you have an investment to make it is better to make it in your home town, where you can stand on the land and see the building, or know what is being done with it, than to put it in the hands of somebody far away in a business over which you have no control or in the management of which you have nothing to say . (Applause.)

Dr. H. A. Jegi, Galesville: I endorse all the doctor has said, and more. I go him one better; I never allow a man to get away from me after he asks me for his bill without giving it to him in total. I carry in my vest pocket a little memorandum book containing a copy of all accounts. I have the accounts revised about once in two weeks. This also serves as an insurance of your accounts.

This system of keeping accounts has paid me well. The time to collect a bill is when the party wishes to pay. If you meet him in the country take his money, and send him the receipt when you get to the office.

Dr. W. B. Hill, Milwaukee: I am very much interested in this paper. There were two things which appealed to me very strongly; one was that he recommended that we have business meetings connected with the county societies. I remember of one year when I had to do with the program of the Milwaukee County Medical Society, we arranged a meeting where we had something to eat, and then we "chewed the rag" over fees and bills, and I want to say it was the only meeting of the Milwaukee County Medical Society where everybody got up and took a swat at it. It was a very enthusiastic meeting, and they adjourned it and had another one aside from the regular meetings, because they did not get through. It was really a good thing outside of any good it might have done the doctors in the way of making them better business men, because it got them all talking, and all interested in the Society. I can vouch for that part of the paper as being practical and very feasible.

There is another point brought out, which I have never heard brought out in a paper before, and one that I consider of the greatest importance to the profession, and one that I feel ought to be emphasized. He said, "let there be no flat rate." There is scarcely a doctor in the profession but what has a flat rate. He either makes a call for a dollar, or a call for two dollars or three dollars, or what not. It does not make any difference whether he goes in and spends an hour in making a careful examination, and goes home and studies in his books until midnight and worries about it until he finds out the trouble, it is a dollar or two dollars or three dollars, as the case may be; or perhaps he goes in for a second or third call for the measles and chucks the patient under the chin and says "you are all right," and it is

the same price that he charges. In one instance he earns ten times the usual fee, and in the second instance very little. I think it would be well for the man engaged in general practice to consider this matter, and consider it in the same light that the surgeon has considered it from his point of view. The reason that the surgeon is so much more successful financially than the internist, as a rule, is because he makes the patient pay for his work. A surgeon may take a longer time to operate on an ingrowing toe-nail than he does to do a laparotomy, but he does not charge the same fee for the one that he does for the other; he takes all these matters into consideration, as the doctor has pointed out the risk and the responsibility he has taken. We should do that in internal medicine. When we take a man through pneumonia, for instance, it does not make much difference whether we are successful in carrying him through in ten days, or whether it has dragged along ten weeks, if we do the man good service, he should pay well for it and pay just what it is worth, taking into consideration the man's circumstances and the responsibility taken in the case. It is going to be a difficult matter for us to bring that into general vogue, but I think it should be discussed among the internists, and let them start out with the view of charging a person what the services are worth, regardless of the number of calls made.

PRESIDENT: Is there any further discussion? If not, I wish to add that I am reminded of a personal experience in an attorney's family. I wish also to make a little confession of guilt along the lines of Dr. Sheldon. All that he said is true of myself. When I finished the service in this attorney's family—he was an able attorney and a good business man—he said, "Doctor, send in your bill, you medical men are often too slow; don't you know that biscuits go best when they are hot, and the same thing is true of your accounts." We should render a statement of our accounts at the close of the service as your mechanic does when he makes a repair on your machine; you get a statement the next day, so many hour's work, so much charge; you may let it run to the end of the month, and he will send you a monthly statement. The same is true if you make a purchase at a good store; you get a statement of the items you purchase, and at the end of the month you get a statement for the month's service they have rendered you, with the expectation that you are going to meet it right away. Which one of us is granted time along any line of his operations; it does not make any difference what your undertaking, or who is serving you, when that service is rendered the man is there with the bill. Now we are serving the people, and we let our bills go anywhere from a month to five years—I have heard of some doctors who are supposed to not send any bills at all.

DR. W. F. ZIERATH, Sheboygan (in closing): Just a word in closing. In Dr. Evans' paper, which was read by Dr. Sleyster, he discouraged the idea of the doctor being a good business man, and stated that the doctor who was a good business man was not a good scientific doctor. I cannot agree with him. If a man has to sit in his office and worry as to how he is going to take care of his family, and how he is going to get along, he cannot be a good scientific man; he has not the ambition to study if he is worrying about his financial affairs; and it behooves every one of us

if we want to be scientific physicians, and up to the handle professionally, to have the money to do it with, and we should not have these financial worries to bother us. It behooves every one of us to be good, financial men, and thereby be better physicians.

---

## DIABETES INSIPIDUS.*

BY FRED JOHNSON, M. D.,

NORTH FREEDOM, WIS.

In presenting these cases for your consideration it is not alone that they are rare cases, but that there are some facts in regard to their etiology that are not found in text-books. The best definition that I could find is a disease characterized by polyuria with low specific gravity, polydipsia, dryness of the skin, and various neurotic manifestations.

Holt says that this condition is very rare in children even more so than in adults. Osler only finds three cases in twelve years in 329,000 patients, but Futcher of Baltimore finds three cases in 50,000 patients treated. In regard to age Strauss finds in 85 cases, 35 were from ten to twenty-five years old and nine cases were under five years. Other reports in regard to age varies. Males are more frequently affected than females.

Jacobi in family practice finds it to follow cholera, anemia, and whooping cough. B. Leick's case followed concussion of the nervous system. In Futcher's nine cases, four were so-called idiopathic and five secondary or symptomatic. The latter had striking cerebral manifestations; four were undoubtedly syphilitic in origin. In other cases it followed fright, injury, sunstroke, debauchery, malnutrition and sometimes acute infectious diseases. Both of my cases followed influenza.

Heredity seems to play some part as it follows in families where they have had glycosuria and albuminuria. A. Weil gives the history of five generations of a family with 219 individuals of which thirty-five of the number presented diabetes insipidus.

Erbstein thinks that this disease develops from a nervous basis, either from a material injury to the nervous system, especially of the medulla oblongata, or from a functional disturbance of the nervous system such as is observed in a general neurosis. K. Engel studied

---

*Read at the meeting of the Third District Medical Society, Janesville, March 28, 1911.

it from the point of view that the kidney had lost its ability to secrete a concentrated urine and whether this could be regained under favorable conditions. R. Finkelnberg reports a case of diabetes insipidus accompanying cerebral syphilis, another fracture of the base of the skull, another epilepsy in a hard drinker, and a fourth in a case of concussion of the brain. The concentrating power of the kidney did not seem disturbed in any of them.

Claude Bernard's celebrated experiment of injury to an area in the floor of the fourth ventricle which produced simple polyuria is an old story. It has been determined that in the majority of the cases there is disturbance in the basal cerebral area. Also injury to the vermiform process of the middle lobe of the cerebellum is another method of producing polyuria. Kahke in 1886 claimed that injury to the middle lobe of the cerebellum produced a temporary polyuria and injury to the medulla oblongata produces a permanent polyuria. This throws some light on the existence of paralysis of the sixth nerve which is occasionally seen in this disease. Thus we see how it is that a tumor of the medulla or the base of the brain, or a basilar menigitis of syphilitic or other origin produces symptoms of diabetes insipidus. The essential cause of this disease in the above has not yet been settled.

My idea is that the hypophysis cerebri by excessive secretion may have some bearing on this condition. Harvey Cushing finds with injection and feeding experiments that in the posterior lobe, or its epithelial investment, is a substance which causes increased blood pressure, dilatation of the pupils, diuresis, and when given subcutaneously, or injected over long periods of time is likely to produce marked nutritional disturbances; and that injection of the anterior lobe, at least in cases of young animals, appears to have some influence in stimulating growth. It was subsequently shown by Shafer and Maynes that this active principle of the posterior lobe disturbed the kidneys and increased the flow of urine. S. J. Crowe finds the effect of repeated injections over long periods of time leads to a progressive emaciation. F. W. Marlow reports a case of a woman with an enlarged hypophysis who suffered with amenorrhea, polyuria (six quarts in twenty-four hours), some thirst, some headache, numbness of the hands, increase of fat and defect of vision.

While we find this condition often following some disease of the upper respiratory tract, how often the sphenoid sinus is involved in these cases we do not know. But we do know that spinal meningitis and poliomyelitis are communicated from the nares into the meninges. And when we remember that the sella turcica is separated by a very

thin plate of bone from the sphenoid sinus, it is easily seen how the pituitary body may become involved in these inflammatory processes. The inflammatory process producing an increased secretion from the posterior lobe would result in a polyuria, polydypsia, emaciation, and neurotic disturbances.

The pathology is very vague as there is nothing constant at autosy. Futcher says, "the most constant anatomic findings are enlargement of the kidneys, congestion of the vessels and dilatation of the tubules." Some seem to think it is due to vasamotor disturbances of the vessels due to local irritation of various causes. Others seem to think the irritation is in the floor of the fourth ventricle. The hypophysis cerebri has not yet been worked out.

The clinical history is best given by the report of my cases.

Case 1. Patient a boy, age seven years; never very strong, had pneumonia twice with the result he was taken good care of, and not allowed enough outdoor liberty. Father, a typical over-energetic New Englander, one of those men who never seem to rest. Mother, a Southerner, of a rather nervous disposition, but nothing definite about either to cause any such condition. He is the only child.

December 24, 1904, the boy complained of pain all over, coryza and cough. Found his temperature to be 102° and pulse 120, and rales over both bronchi. Next day, temperature 97° and felt better, but a week later had another mild attack of same nature. Since then complained of pain under umbilicus and down right leg. Could not sleep nights on account of pain and restlessness. Shortly afterwards did not always control urination. Pain persisted for weeks in left leg, was led to think of hip-joint disease, but nothing definite. One peculiarity was he never complained of headache.

In February his thirst commenced and he wanted to drink continually; this, with the fact there was not any local trouble to cause the frequency of urination, led us to think of some diabetes. In twenty-four hours specimen of urine, there was passed five pints, sp. gr. 1004. No albumen or sugar. Both knee jerks were exaggerated. He grew very weak and emaciated. In the meantime his nervous symptoms were on the increase. He never wanted to be left alone, complaining of pain in both eyes, shoulders and abdomen. Grew very irritable and exacting. Jealous if his mother did not give him full attention. Would lay in all kinds of twisted positions and any place. Drowsy at all times, but slept very little. Whimpered and cried most of the night with pain and continued to have frequent urination. Lost in weight, skin dry, very weak. Appetite fairly good. Tongue coated slightly, but could not detect anything localized.

As the symptoms increased and as there were so many symptoms of some central brain trouble, while I was unable to diagnose anything except diabetes insipidus and eye strain, I referred the case to Dr. Washburn, who could detect nothing more than we had. At the same time Dr. T. C. Phillips fitted him with glasses for his hyperopia.

From the time he made the trip his urinary symptoms commenced to subside rapidly. He gradually slept better, but still complained of pain in

abdomen and shoulders. This kept up until April 8, 1905, when after recovering from another acute attack of bronchitis, all the other symptoms subsided and he has been a well boy since.

Case 2. Business man, age forty. Family history negative. January 13, 1910 complained of headache, sore throat, chills, fever and emesis, large amount of urine passed. Examination showed both tonsils enlarged, also a congestion of the nares and pharynx. Urine, acid in reaction, sp. gr. 1010, neither albumen nor sugar present. In three days the acute symptoms subsided. I next saw him on January 25, with the polyuria so intense that he nearly filled a slop-jar at night, and during the day would not keep track of it; also very thirsty, complained of lumbago and felt peculiar sensations all over his body and vomited easily. He lost about ten pounds in flesh. February 3, referred the case to Dr. Ogden, but before he got to Milwaukee his urinary symptom had subsided. Dr. Ogden found on examination that his lumbago was due to strain of the sacro-iliac joint and had him fitted with a belt which relieved that trouble. At times he still has excessive urination for a day or so, but not constant.

Thus we see that the essential symptom is the excessive quantity of urine. In the second case so great that he could not keep track of it. Others report as much as five to ten and twenty liters in twenty-four hours. Thirst was very great but did not increase as much as the diuresis. The specific gravity was low, from 1002 to 1010. Perspiration was decreased and skin dry. Both patients lost flesh and emaciation was very rapid. I did not notice any effect upon the sexual desire. The appetite was not changed. Nervous symptons were marked and as usual the most common nerve lesion was of the sciatic nerve. One peculiarity was the lack of headache. In a majority of cases of hopeless cerebral diseases we find these symptoms; also in functional neuroses as in hysteria and epilepsy which were both absent in these cases. It is easy to make a diagnosis from diabetes mellitus with the sugar test and if there is any pruritus it is very mild in diabetes insipidus. But these conditions may pass from one to the other.

The prognosis is good if not due to some central nerve lesion. This is often a protracted disease, as in the case reported by J. C. Verro which lasted twelve and one-half years without much inconvenience, but as a rule is of shorter duration. A. H. Carter reports a case resulting in fatal coma and E. Mann's case was followed by diabetes mellitus and on post-mortem was found to have a carcinoma of the pancreas. Dr. Futcher says, "that the prognosis is good in the idiopathic cases. It is graver in the symptomatic cases as the emaciation and weakness develop rapidly." Death may occur in the latter group.

Treatment as a rule is unsatisfactory but arsenic, belladonna, ergotine, and bromides have been tried. B. Leick advocated strychnine in large doses but with such marked nervous symptoms I was afraid of it. In most cases anti-syphilitic treatment should be tried. Case two cleared up before any treatment had a fair trial.

In the first case we found a modified Weir Mitchell rest cure filled the bill. A light diet of great variety was allowed. Moderate amount of exercise was given but was particular not to allow it to be overdone. When the weather permitted, out-door exercise was urged, besides this he was wheeled about in chair to get all the fresh air possible. As his urinary symptoms and nervous conditions were of the same cause we did not try to treat them separately, but treated his general condition with tonics and sedatives as they were indicated. When he arrived home from Milwaukee after having his hyperopia corrected he commenced to improve before any change of medicine, and after his third attack of bronchitis was apparently well.

O. Menkowski advises the estimation of the specific gravity and chloride content of the urine after the injection of a considerable amount of salt. If the specific gravity and chloride content increases it clearly shows that the power of concentration is still retained, thus the restriction of the intake of water may prove a useful therapeutic measure. On the other hand if the dose of salts is seen to influence more the amount of urine than the chloride content, then the patient should be put on a diet poor in chlorides and nitrogen. This usually seems to give some relief. The strict dict should not be kept up long, but repeated at intervals.

Above all medical treatment this case was a case for psychotherapy. I felt that toward the last the pains were habit. The boy had to be treated as well as his body; his desire for health stimulated. I found that psychology is as necessary in the practice of medicine as physiology. So in this case when we felt that it was not a hopeless one of central nervous trouble, I kept suggesting the benefits of health. Even to promising him that he would be able to lick any boy in town, and making him promise to sleep well at night, and persuading him that the pain was better. It worked better than all medicines.

In conclusion I would like to call your attention to the following points:

1. Influenza is not the harmless disease the public seems to think.

2. The pituitary body is not the seat of the soul, but among other functions has some influence over urination.

3. That we need more study and investigation of the pituitary gland.

4. The necessity of a more appreciative attitude of the profession to psychotherapy.

---

**Diagnosis and Treatment of Diseases of Women,** by HARRY STURGEON CROSSEN, M. D., Professor of Clinical Gynecology, Washington University, St. Louis. Second Edition, revised and enlarged, p. 991, with 744 illustrations. Price $6. C. V. Mosby Co., St. Louis, Mo.

As stated in the preface this work is limited exclusively to a practical elementary consideration of diagnosis and treatment of Diseases of Women.

The author has apparently spared no effort in attempting to make this work complete, it is profusely illustrated and the book work is fairly satisfactory. Like so many other similar treatises it has the great fault of trying to cover too much ground, as if presenting the subject in complete form. Even so limited a subject as gynecology can not be squeezed into a book of 1,000 pages although aided by 774 illustrations. Writers should assume that their readers have some intelligence and possibly a little rudimentary information and might well omit even beautiful pictures of instruments essential to a successful amputation of the cervix or minute instructions as to the methods of staining gonococci with subsequent decolorization. Much valuable space could thereby be saved or perhaps better spent for example upon consideration of the physiology of the ovary which has possibly some bearing on the subject however "practical" may be the view point.

No one ever learned to operate from books alone and authors should realize the importance of making clear the *rationale* of therapy by bringing out the morphologic and physiologic abnormalities, their causes and results. This is the larger part of the problems both of learning and of practising and therefore of teaching. No man's experience is sufficient to cover all sides of any subject and readers have a right to know the sources of information, the authority for statements not original with the writer. Also this begets accuracy.

On page 7, figure 9 ("Backache from pelvic disease. Indicating pain extending down over sacrum") illustrates this contention. Pelvic disease is a pretty broad term, it might even include a relaxed sacroiliac joint in the male. So too, equally instructive poses by the same obliging model shows her indicating with expressive hands the location of pain in kidney disease, in stomach disease and in liver disease. The gall bladder seemed to have escaped her attention.

This work would have been more practical had it been more scientific, less diffuse and had striven not to teach the whole game of checkers but rather to stimulate a live interest in the fundamental principles of chess.

J. L. Y.

---

# WISCONSIN MEDICAL JOURNAL

OFFICIAL PUBLICATION OF THE STATE MEDICAL SOCIETY OF WISCONSIN.

A. W. MYERS, M. D., Editor.
141 Wisconsin Street, Milwaukee.

J. P. McMAHON, M. D., Managing Editor.
141 Wisconsin Street.



Publication Committee:

A. J. Patek, M. D., Milwaukee. G. E. Seaman, M. D., Milwaukee
O. H. Foerster, M. D., Milwaukee. C. S. Sheldon, M. D., Madison.
S. S. Hall, M. D., Ripon.

Collaborators:

The Council.

M. R. Wilkinson.....Oconomowoc
G. Windesheim.....Kenosha
F. T. Nye.....Beloit
W. Cunningham.....Platteville
J. V. Mears.....Fond du Lac
H. W. Abraham.....Appleton
Edward Evans.....La Crosse
T. J. Redelings.....Marinette
O. T. Hougen.....Grand Rapids
R. U. Cairns.....River Falls
J. M. Dodd.....Ashland
H. E. Dearnolt.....Milwaukee



Annual Subscription. - - - $2.00. Single Copies, - - - - - $0.20

Address all business communications to
WISCONSIN MEDICAL JOURNAL,
504 Goldsmith Building, Milwaukee.

[Entered as second class matter, June 30th, 1903, at the Post Office at Milwaukee, Wis., under Act of Congress, March 3rd, 1879.]

Vol. X. MARCH, 1912. No. 10


## EDITORIAL COMMENT.

### THE WAUSAU MEETING.

In less than two months the time for the next meeting of the State Medical Society will have arrived. Remember the dates, May 22nd to 24th.

The program promises well. We hope to be able to give it in full in the April Journal. Everything points to a great meeting.

Be sure you are there.

## MEDICAL DEFENSE WHICH DOES NOT DEFEND.

It has come to our notice that one of the companies most actively engaged in advertising itself as The Real Thing in the line of Medical Defense has a little clause in its contract which excuses it from participating in the defense of a malpractice suit in case this is brought as a countersuit because of a claim for fees.

Now the Medical Defense Committee of the State Medical Society finds that those are exactly the circumstances under which a large proportion of the malpractice suits arise. These suits are just as troublesome and expensive and usually quite as unjust as most of the others. The result is that the insurance provided by the company under consideration does not actually insure.

It would be well for those who carry insurance of this character to read their policies carefully to see where they stand.

## THOROUGHNESS IN PRACTICE.

A wise and loyal member of our Society has suggested that we ought to republish two of the papers read before the last meeting of the Society at Waukesha, which have already appeared in the Journal. These papers are "The Relation of the Physician to the Public Campaign Against Tuberculosis", by Dr. H. E. Dearholt, which was printed in the Journal for July, 1911, and "Essentials and Non-essentials in Physical Diagnosis", by Dr. R. C. Cabot, which appeared in the September Journal.

Now, instead of reprinting these papers we are going to ask you, each one of you, every reader of the Journal, to search in his pile of Journals (for we are sure you keep them all!) for the July and September numbers of last year, and when you have found them you are to read these articles over and over again, read them on your knees, read them aloud, read them to your family. Keep at them until you realize that what is said there applies to you individually in your every day medical work.

Now, this loyal Older Brother who made the suggestion of reprinting these papers goes on to say: "I would not go so far as to make a wholesale charge of ignorance, nor would I twit every physician with being unable to make an early diagnosis of tuberculosis; in fact, I believe that by far the larger part of the general practitioners show themselves as competent as the general run of so-called specialists. But I will admit that there is a type of doctor who is not honest with his patient. He is a *financial coward;* that is the long and the short of it. He knows enough, but the fear of losing his patient and his fees is the inducement to withhold the truth.

"The man who assumes to know everything, or all that is known about any one thing, is a dangerous man in any community. I think that if we were honest with our patients when we have a case where we are unable to make a satisfactory diagnosis, if we took that patient to some skillful diagnostician and asked him to work out the problem for us, we would be the gainer every time; retain the patient and the fees, and have our knowledge enhanced. I have practiced this for many years, not only when I was in ignorance myself, but also when the patient did not believe in my diagnosis, and always to the advantage of both the patient and myself.

"It is better to confess ignorance than to assume knowledge when you do not possess it. A doctor who is honest with his patient never loses that patient's respect and rarely loses the patient."

It is good for us to hear words like these and to take them home to ourselves. The practice of medicine is what we make of it, and if we are content to slip along, giving poor service to our patients, using consultants chiefly for grafting purposes, doing the smallest possible amount of studying as we go, trusting to luck, bluff, or bravado to cover up our mistakes if we are discovered, we are disgracing our profession and our humanity.

From the nature of medical practice the doctor's own conscience is often the only judge to decide whether or not he is giving his patients good service or poor service. Read Dr. Cabot's paper and you will realize that it is within your power to give good service. Read Dr. Dearholt's paper and you will realize that many of us are not doing it! The remedy lies in our own hands. What we need is more thoroughness in our work, higher ideals of our profession, and more moral backbone.

## ADMINISTRATION OF DIPHTHERIA ANTITOXIN BY THE MOUTH.

In the British Medical Journal for July 15, 1911, Cumberlege writes of his experiences with antitoxin given by the mouth in diphtheria. His experience has been that the beneficial effects are distinctly seen within a few hours although perhaps not quite so promptly as when given hypodermically.

He believes that given by the mouth a far smaller dose is required, although why this should be so is not explained. He states that he has never given more than 4,000 units at a time, and that 2,000 units followed up, if necessary by a further dose, is the amount usually given.

Given in this manner the struggle caused by the fear of the needle

and the pain is entirely avoided and this element of strain upon the heart is eliminated.

By giving it in this way it is possible to give continued dosage by making the antitoxin into a mixture and ordering it to be given every two or four hours as the case may be. He has observed that in most cases there is a diaphoresis and fall in temperature and pulse-rate shortly after giving the serum, and often the patient falls into a deep sleep.

Another point in favor of the oral administration of the antitoxin, in Cumberlege's opinion, is the freedom from the signs of serum sickness in any form following its use in this manner. This might especially commend its use in this manner in cases where antitoxin had previously given rise to unpleasant symptoms.

## THE PLANS OF THE CHIROPRACTORS.

The following item culled from the daily press is of interest:

"DRUGLESS HEALERS OPEN WAR.

FRAME PROPOSED LAWS TO PUT MEDICAL PROFESSION ON THE DEFENSIVE.
*Bills to be Introduced in Every State Legislature by Chiropractors Affect Prescriptions and Suits.*

La Crosse, Wis., March 4,—(Special) Lieut.-Gov. Thomas Morris and his law partner, Fred H. Hartwell, as general counsel for the Universal Chiropractors' Association, are heading a campaign of the drugless healers to regulate the medical profession and put it on the defensive in the war it is now carrying on against the Chiropractors.

The attorneys have prepared four bills which will be submitted to a meeting of the drugless healers at the Hotel La Salle, Chicago, today, and will later be introduced in the legislatures of all the states.

One bill provides that every prescription shall contain the English word for every foreign term used, another that the contents of such prescriptions shall be explained to the patient and a third, that the prescriptions shall be issued in triplicate, one copy for the doctor, one for the druggist and a third for the purchaser.

The fourth bill provides that in law suits resulting from surgical operations the burden of proof shall be upon the surgeon to prove that it was made in a skillful manner."

The only trouble with a beautiful plan like this is that the general public has to be "put on the defensive", as well as the medical profession. How long it will take "Lieut.-Gov. Thomas Morris and his law partner, Fred H. Hartwell" to discover that the present laws are to protect the public from ignorant and unqualified pretenders and not to protect the medical profession remains to be seen, but for the

sake of their own reputations for ordinary intelligence it is to be hoped that the period may not be long.

## THE BUSINESS SIDE OF PRACTICE.

Few physicians can afford to neglect the business side of practice. It is not the only side. The humane side and the scientific side come first and must continue to come first if the business side is to be considered from any broad point of view.

But there are many features of the practice of medicine as a livelihood which deserve careful consideration and we can all profit by the sensible suggestions contained in Dr. Zierath's article on the Business Side of Practice which is contained in this number of the JOURNAL.

## RELIABILITY OF ERGOT PREPARATIONS.

Some months ago there appeared a bulletin from the U. S. Public Health and Marine Hospital Service on the biologic standardization of ergot by Professor C. E. Edmunds of the University of Michigan and Dr. Worth Hale of the Hygienic Laboratory. The work of Edmunds and Hale showed that methods are available whereby a trained pharmacologist can determine with considerable accuracy, the activity of ergot preparations. The report also showed that despite the claims of the manufacturers, the proprietary ergot preparations were unreliable. For the findings of Edmunds and Hale on the proprietary preparations of ergot two explanations might be advanced —either the biologic testing had been done incorrectly by the manufacturers (or not at all) or that the preparations had deteriorated after having been tested. The first explanation would mean that the widely exploited scientific work of the pharmaceutical houses of this country is largely claptrap, the second that the loud assertions of permanence were untrue. Neither explanation is to the credit of American pharmaceutical manufacturers.

It now appears that these serious charges have stung one of the interested concerns into action. One firm whose product suffered the least in the report, has been able to overcome the faults found by Edmunds and Hale and, having modified its claims to clearly bring out the facts, has secured its inclusion in New and Non-official Remedies (Jour. A. M. A., 3-9, 1912, p. 701).

It thus seems that at least one of the many proprietary ergot solutions is now deserving of the physician's confidence.

## NEWS ITEMS AND PERSONALS.

**Dr. Erickson,** of Stanley, sustained a broken arm in a runaway on February 27th.

**Drs. F. L. Foster and G. F. Scheib** have formed a partnership at Fond du Lac.

The home of **Dr. Beebe,** at Colfax, was destroyed on February 18, by a gasoline explosion.

The condition of **Dr. W. T. Rinehart,** Ashland, is still serious. He is now at St. Joseph's Hospital, St. Paul, Minn.

**Dr. S. L. Pickett,** Bayfield, was painfully, though not seriously injured in a collision with a bob-sled on March 1st. He received a severe wrench of his right foot.

**Dr. Joseph Schneider,** Milwaukee, has donated $25,000 to the University of Wuerzburg, Bavaria, to be used in the erection of a hospital for the treatment of the poor, suffering from diseases of the eye.

**Dr. C. D. Packard,** for many years located at Rhinelander, has purchased a farm of 240 acres in Oneida County, near Roosevelt, and intends making this his home. The doctor makes this change from city to rural life for the benefit of his health.

**Dr. J. G. Egan,** of La Crosse, who sustained a severe staphylococcus infection of one eye while performing a tonsillectomy, by the patient coughing into his face during the operation, is slowly recovering.

The **Berlin Hospital** was formally opened to the public March 6th, by the Berlin Hospital Association. The building and grounds were donated by Porter B. Yates of Beloit. The hospital will accommodate twenty patients.

The first steps toward adequate provision for quarters at Madison for the university medical advisory and clinical department were taken when the board of regents appropriated $15,000 for an addition to the former John M. Olin home on Langdon Street, recently purchased by the University. The board called for plans for the proposed structure and will consider them at its April meeting.

**The State Board of Health** has served an ultimatum upon the mayor of Kenosha to cause a stricter enforcement of the health laws, failing in which the board will send a special officer to Kenosha to take charge of the situation at the city's expense. Scarlet fever and diphtheria are prevalent.

The spread of **small-pox** in many parts of Wood County has prompted the State Board of Health to call a meeting at Grand Rapids of all the health officers in the country, together with the physicians, particularly from the infected districts, to devise ways and means of controlling the disease.

Conflict over scarlet fever quarantine in Muscoda reached a startling culmination on February 21, when a red "scarlet fever" card was tacked up on the house around which suspicion had been revolving for over a week,

the house which Health Officer James had steadily asserted was free from the disease.

The tardy quarantine came as an afterclap to a stormy meeting of the board of health the night before, at which charges against the health officer's regime were laid before Dr. L. E. Spencer, member of the State Board of Health, sent in response to local protest.

At a meeting of the Milwaukee County Medical Society, held on March 8th, a resolution was adopted asking Congress to give Dr. A. I. Comfort of the National Soldiers Home a permanent pension. Dr. Comfort has been in the service of the government for nearly fifty years.

Damage suits aggregating $120,000 have been brought against John Till, the "plaster doctor," by Fred Stein and T. J. Flaherty, both of Minneapolis, in the Ramsay County district court. Charges of deceit and fraud are made.

**Deaths.** Dr. Herbert F. Prasch, Chicago, formerly of Beaver Dam, died on February 4th in an insane asylum.

Dr. James H. Noble, Eau Claire, died on March 4th at Roswell, N. M., aged 61 years. He was a graduate of the Hahnemann Medical College, Chicago—1871.

Dr. Noble was a former state senator for the Twenty-fourth Wisconsin district.

Dr. Thomas Gilluly, Union Center died suddenly on March 12th. Dr. Gilluly graduated from Rush Medical College in 1871. He was a member of Juneau County and the State Medical Societies.

**Removals.** Dr. John Ovitz, Platteville, who has been associated with Dr. Cunningham for the past two years, has removed to Genoa, Ill.

Dr. E. R. Murphy, Crandon, has removed to Rhinelander, where he fills the vacancy caused by the retirement of Dr. C. D. Packard.

Dr. Francis J. Stirn, Cudahy, will take up the practice of Dr. E. R. Murphy at Crandon.

Dr. J. W. Christensen, Kendall to Westby.
Dr. G. F. Andrew, Honey Creek to Ferryville.
Dr. G. H. Perrin, Wauzeka to Menomonie Falls.
Dr. W. O. Blanchor, Grand Rapids to Sebastopol, Cal.
Dr. P. A. Wheeler, Oshkosh to Columbia, Tenn.
Dr. B. T. Williams, Hudson to Minneapolis, Minn.
Dr. Wm. E. Wray, Tomahawk to Chicago, Ill.

## NEW DISPENSARY BUILDING OF THE PHILADELPHIA POLYCLINIC AND SCHOOL FOR GRADUATES IN MEDICINE.

The opening of the new dispensary building of the Philadelphia Polyclinic and College for graduates in medicine, Eighteenth and Lombard streets, was celebrated on the afternoon of February 5, 1912, by a formal reception tendered by the President of the Board of Trustees, Mr. Herbert L. Clark, to the Board, the Incorporators of the Hospital and the members of the Medical Staff.

This institution was organized in the year 1882, for the purpose of meeting a long-felt demand for post-graduate teaching in the city of Philadelphia. It was the first institution to devote its labors to this work in Philadelphia, and it continues to be the only institution of this character. In the various years of its existence, it has extended instruction to many students from all parts of the country, as well as from all parts of the world.

Aside from this very important line of work, it has rendered especial service to the city of Philadelphia in that it has conducted one of its largest charitable medical services. From the time of its organization, up to the present, there has been an increasing number of patients treated from year to year, until at the close of the present year the official records of the institution show that in the year 1911, in its out-patient service, 17,769 new patients have been treated, with a total number of 78,386 visits; that in its accident emergency ward 8,706 new patients have been treated, with a total of 9,104 visits; and that in the wards of the hospital there have been treated 1,746; and that 1,167 operations under ether have been performed. This enormous service began to overtax the capacity of the institution several years ago. Its Board of Trustees, appreciating this fact, in 1907, undertook construction of the building which was formally opened February 5th.

This building is constructed especially to accommodate the patients who visit the dispensaries and accident wards. Incidentally, however, it makes available to the institution much needed space in the original building for the increase of its beds for in-patient service, making available space for more satisfactory and complete operating room for private patients, more comfortable accommodation of its students, a better housing of its executive force, and at the same time, separate entirely the accident ward and out-patient service from the hospital.

The new building has been made possible only through the generous support of public-spirited citizens, the untiring efforts of its Board of Trustees, and generous appropriations of the Legislature of the State of Pennsylvania.

It is located on the property adjoining the older building, with the entrance from Naudain street. This location is in a portion of the city in which charitable work is greatly demanded, as evidenced by its enormous dispensary service.

# THE STATE MEDICAL SOCIETY OF WISCONSIN

ORGANIZED 1841

## Officers 1911-1912.

J. M. DODD, Ashland, President.

T. J. Redelings, Marinette — 1st Vice-President.

C. A. Armstrong, Boscobe — 2d Vice-President.

H. E. Dearholt, Milwaukee, 3rd Vice-President.

CHAS. S. SHELDON, Madison, Secretary. S. S. HALL, Ripon, Treasurer.

ROCK SLEYSTER, Waupun, Assistant Secretary.

## Councilors.

TERM EXPIRES 1917.

1st Dist., M. R. Wilkinson, - Oconomowoc
2nd Dist., G. Windesheim, - - Kenosha

TERM EXPIRES 1914.

7th Dist., Edward Evans, - - La Crosse
8th Dist., T. J. Redelings, - Marinette

TERM EXPIRES 1912.

3rd Dist., F. T. Nye, - - Beloit
4th Dist., W. Cunningham, - - Platteville

TERM EXPIRES 1915.

9th Dist., O. T. Hougen, - - Grand Rapids
10th Dist., R. U. Cairns, - - River Falls

TERM EXPIRES 1913.

5th Dist., J. V. Mears, - Fond du Lac
6th Dist., H. W. Abraham Appleton

TERM EXPIRES 1916.

11th Dist., J. M. Dodd, - Ashland
12th Dist., H. E. Dearholt, Milwaukee

## Delegates to American Medical Association.

L. F. Bennett, Beloit. C. S. Sheldon, Madison. A. H. Levings, Milwaukee

## Alternates.

F. S. Wiley, Fond du Lac. Wilson Cunningham, Platteville. R. G. Savle, Milwaukee

## Committee on Public Policy and Legislation.

A. W. Gray, Milwaukee, Chairman. J. P. McMahon, Milwaukee. F. F. Bowman, Madison.

## Committee on Medical Defense.

G. E. Seaman, Milwaukee, Chairman. S. S. Hall, Ripon. A. J. Patek, Milwaukee.

## Committee on Prevention of Tuberculosis.

C. A. Harper, Madison. G. E. Seaman, Milwaukee. M. P. Ravenel, Madison
J. M. Beffel, Milwaukee. C. H. Stoddard, Milwaukee.

## Program Committee.

A. W. Gray, Milwaukee, Chairman.

## NEXT ANNUAL SESSION, WAUSAU, MAY 22, 23 AND 24, 1912.

The Wisconsin Medical Journal, Official Publication.

## LIST OF EXECUTIVE OFFICERS OF COUNTY MEDICAL SOCIETIES.

| County. | President. | Secretary. |
|---|---|---|
| Ashland-Bayfield-Iron | J. M. Meyers, Odanah | J. M. Dodd, Ashland. |
| Barron-Polk-Washburn-Sawyer-Burnett | H. B. Crommett, Amery | I. G. Babcock, Cumberland. |
| Brown-Kewaunee | T. J. Oliver, Green Bay | I. E. Levitas, Green Bay. |
| Calumet | W. Martens, New Holstein | J. A. Schmidt, Brillion. |
| Chippewa | A. W. Wilmarth, Chippewa Falls. | A. L. Beier, Chippewa Falls. |
| Clark | H. H. Christofferson, Colby | E. L. Bradbury, Neillsville. |
| Columbia | B. C. Meacher, Portage | A. J. Batty, Portage. |
| Crawford | A. E. Dillman, Steuben | A. J. McDowell, Soldiers Grove. |
| Dane | Joseph Dean, Madison | C. S. Sheldon, Madison. |
| Dodge | J. A. Clason, Neosho | G. W. Henika, Beaver Dam. |
| Door | | |
| Douglas | T. J. O'Leary, Superior | W. E. Hatch, Superior. |
| Dunn-Pepin | C. H. Grannis, Menomonie | L. A. Dahl, Menomonie. |
| Eau Claire | H. A. Fulton, Eau Claire | E. L. Mason, Eau Claire. |

| County. | President. | Secretary |
|---|---|---|
| Fond du Lac | G. F. Scheib, Fond du Lac | F. A. Read, Fond du Lac. |
| Grant | C. R. Pickering, Muscoda | M. B. Glasier, Bloomington. |
| Green | L. A. Moore, Monroe | G. S. Darby, Brodhead. |
| Green Lake-Waushra-Adams | G. E. Baldwin, Green Lake | R. H. Buckland, Green Lake. |
| Iowa | W. S. Lincoln, Dodgeville | W. M. Gratiot, Mineral Point. |
| Jefferson | L. J. Bennett, Ft. Atkinson | C. R. Feld, Watertown. |
| Juneau | C. O. Cron, Camp Douglas | A. T. Gregory, Elroy. |
| Kenosha | H. A. Robinson, Kenosha | C. H. Gephart, Kenosha. |
| La Crosse | C. H. Marquardt, La Crosse | G. W. Lueck, La Crosse. |
| Lafayette | J. C. Hubenthal, Belmont | Susanne Orton, Darlington. |
| Langlade | M. J. Donohue, Antigo | J. C. Wright, Antigo. |
| Lincoln | C. C. Walsh, Merrill | Herbert Saylor, Merrill. |
| Manitowoc | J. R. Currens, Two Rivers | A. J. Shimek, Manitowoc. |
| Marathon | L. E. Spencer, Wausau | S. M. B. Smith, Wausau. |
| Marinette-Florence | H. F. Schroeder, Marinette | M. D. Bird, Marinette. |
| Milwaukee-Ozaukee | J. J. McGovern, Milwaukee | Daniel Hopkinson, Milwaukee. |
| Monroe | A. E. Winters, Tomah | A. R. Bell, Tomah. |
| Oconto | J. B. Atwood, Oconto | R. C. Faulds, Abrams. |
| Oneida-Forest-Vilas | J. M. Hogan, Oshkosh | C. A. Richards, Rhinelander. |
| Outagamie | V. F. Marshall, Appleton | J. P. Dohearty, Appleton. |
| Pierce | E. R. Holliday, Ellsworth | S. F. Rudolf, Ellsworth. |
| Portage | J. D. Lindores, Stevens Point | W. F. Cowan, Stevens Point. |
| Price-Taylor | C. E. Nystrum, Medford | G. H. McClure, Westboro. |
| Racine | E. A. Taylor, Racine | Susan Jones, Racine. |
| Richland | P. G. Lasche, Ithaca | A. D. Campbell, Richland Center. |
| Rock | W. J. Allen, Beloit | E. B. Brown, Beloit. |
| Rusk | G. M. Carnahan, Bruce | W. F. O'Connor, Ladysmith. |
| Sauk | | Roger Cahoon, Baraboo. |
| Shawano | E. Puckner, Wittenberg | Dr. Steubenvoll, Shawano. |
| Sheboygan | Edward Felter, Plymouth | W. F. Zierath, Sheboygan. |
| St. Croix | Lorne Campbell, Clear Lake | W. H. Banks, Hudson. |
| Trempealeau-Jackson-Buffalo | C. F. Peterson, Independence | H. A. Jegi, Galesville. |
| Vernon | John Schee, Westby | F. E. Morley, Viroqua. |
| Walworth | R. E. Rugh, Lake Geneva | M. V. Dewire, Sharon. |
| Washington | F. P. Leich, Jackson | S. J. Driessel, Barton. |
| Waukesha | R. E. Davies, Waukesha | Sara T. Elliott, Waukesha. |
| Waupaca | T. E. Loope, Iola | G. T. Dawley, New London. |
| Winnebago | B. C. Gudden, Oshkosh | W. L. Herner, Winnebago. |
| Wood | J. A. Jackson, Rudolph | J. B. Vedder, Marshfield. |

# SOCIETY PROCEEDINGS.

## GREEN LAKE-WAUSHARA-ADAMS COUNTY MEDICAL SOCIETY.

The regular meeting of the Green Lake-Waushara-Adams County Medical Society was held at Neshkoro, February 29th. The physicians met and had lunch together at the Hotel Callaghan. The meeting was called to order by Dr. Baldwin. Motion was made and carried that Dr. G. A. Steele of Red Granite be accepted as a member by transfer from Calumet County Society.

The minutes of the last meeting were read and accepted. Motion was made and carried to instruct the Secretary to invite the 9th Councilor District Society to hold their August meeting at Green Lake, and to join the local Society in their annual picnic. Dr. Clausen of Red Granite gave a paper on the *Treatment of Infectious Wounds.* All took part in the discussion of the paper which was a very practical presentation of the subject.

The following men were present: Drs. Racek, Clausen, Steele, Kerner, Wiesender, Riordan, Baldwin, and Buckland.

Drs. Clausen, Steele, and Kerner deserve special mention for pluck having driven ten and twenty miles on a cold day to attend the meeting.

Meeting adjourned.

R. H. Buckland, M. D., *Secretary.*

## KENOSHA COUNTY MEDICAL SOCIETY.

The Kenosha County Medical Society held its regular monthly meeting, March 1, 1912, at the residence of Dr. George T. Kimball, with twenty-two members in attendance, President H. A. Robinson in chair.

After the usual routine, resolutions favoring the passage of a proposed new Health Ordinance for Kenosha were adopted and signed by every member present.

This ordinance provides for a Non-Partisan Health Commission of five members, two of whom shall be regularly qualified physicians, to be appointed by the Mayor, and after established, each to serve for a period of five years. This Commission to have power to regulate all matters relative to the public health in Kenosha, which are not definitely stated in the Ordinance; such as to make rules for the control of any contagious epidemic; to abate any and all nuisances; to make milk and water examinations; to have charge of Public School Inspections and all matters affecting the health of the city. To employ an officer called the Commissioner of Health, who shall be a regularly qualified physician and the executive head of the Commission. The Commissioner of Health to devote his entire time to the work and receive adequate remuneration therefor and not to practice his profession while holding this office. Minor officers to be known as Health Officer and Nuisance Inspector can be appointed whenever necessary.

The penalties of the Ordinance call for fines or imprisonment and are aimed not at property owners, whom experience has proven are impossible to reach in some instances, but at the person who actually commits the offense. Kenosha hopes to pass this Ordinance and to take first rank among Wisconsin cities in health matters.

Following the adoption of the resolution, Dr. Edward H. Ochsner, of Chicago, read a very instructive paper on *Local Surgical Procedures in Non-Tubercular Joint Affections*, after which the members of the Society responded to a call to the dining room with their usual alacrity, where the social period was enjoyed by all.

C. H. Gephart, M. D., Secretary.

## LA CROSSE COUNTY MEDICAL SOCIETY.

The third meeting of the La Crosse County Medical Society was held at the La Crosse Club Thursday evening, March 7th, the president, Dr. Marquardt, in the chair.

After the transaction of routine business Dr. Gundersen showed specimens of hypertrophied prostate and resection of large part of stomach for ulcer of pylorus.

He then reported a series of cases of fractures of the long bones which he had treated with Lane's bone plates, showing X-ray plates of same, both before and after the application of the Lane's splint. In the course of his remarks he particularly emphasized the importance of thorough asepsis during the application of Lane's plates in order to insure a good result. He also exhibited different forms of Lane's plates together with the instruments used in their application.

Dr. Evans also showed a series of X-ray plates of fractures that had been treated by him by the same splint and by wiring.

An interesting and general discussion followed the exhibition of the plates.

GEO. W. LUECK, M. D., *Secretary.*

## MARINETTE COUNTY MEDICAL SOCIETY.

The regular meeting of the Marinette County Medical Society was held at the Hotel Marinette, Wednesday evening, March 13th. It was very enjoyable from several view points. The enthusiasm of the men was high, interest taken by the active members was good and three new men were admitted, making our membership the largest since the organization of the society.

Dr. E. V. McComb read a paper on *Infant Mortality during the Past Year in Menominee, Michigan.* He stated that thirty-four per cent of the entire number of deaths were in children under five years of age and while this is not far from the proportion in other cities of the same size, still the doctor thought the rate was too high and that it could be lessened.

Infants should be nursed by the mother, when possible, for four or five months, and better still for nine months. He dwelt at some length upon the modification of cow's milk and the feeding of artificial foods, being at the best only substitutes for mother's milk.

Dr. F. Gregory Connell, of Oshkosh, was present and gave an address on *An Improved Method of Colon Fixation.* He stated that many of the patients with so-called chronic appendicitis were suffering not so much from the disease of the appendix as from the mal-development of the cecum. He went into the embryology of the formation of the colon, tracing the budding from the left lower quadrant, growing upward to the splenic flexure, then the transverse colon to the subhepatic flexure and then the descent downward of the cecal pouch. It is in this final stage that a rotation of the ascending colon may occur which causes the pain we so often meet. Dr. Connell advises stripping up of the membrane and anchoring it extra-peritoneally.

MAURICE DUANE BIRD, M. D., *Secretary.*

## MEDICAL SOCIETY OF MILWAUKEE COUNTY.

Meeting of January 12, 1912.

Dr. J. A. E. Eyster of Madison addressed the Society upon *Electro-cardiagrams and the Venous Pulse.* Dr. A. W. Myers presented a paper entitled *Spontaneous Hemorrhage in the New Born.*

Meeting of February 9, 1912.

The following papers were presented: *The Embryology of Certain Areas which prove of Surgical Interest,* by Dr. P. H. McGovern. The *Surgical Importance of Certain Vestigeal Structures,* by Dr. C. M. Echols; *Surgical Management of Developmental Defects in the New Born,* by Dr. Harry Greenberg.

DANIEL HOPKINSON, M. D., *Secretary.*

## OUTAGAMIE COUNTY MEDICAL SOCIETY.

Regular meeting of the Society was called to order by the President, Dr. V. F. Marshall, at 5 p. m., March 5, 1912. Minutes of previous meeting read and approved. The next order of business was the election of officers.

The rules were suspended, and on motion, Dr. J. S. Reeve was nominated and the Secretary ordered to case the vote of the Society for Dr. Reeve for President. On similar motion, Dr. W. H. Towne, of Shiocton, was elected Vice-President. On motion, F. P. Dohearty was elected Secretary and Treasurer, the President casting the vote of the Society.

Dr. A. P. Holz, of Seymour, was elected Censor for three years in place of Dr. Reeve, whose term expired, leaving Dr. Holz for three years, Dr. C. G. Maes for two years, and Dr. G. A. Ritchie for one year.

Dr. M. J. Sandborn was elected Delegate and Dr. V. F. Marshall Alternate.

The report of the Secretary-Treasurer was read and accepted, there being a balance of $30.78 in the Treasury.

The report of the Library Committee was read and approved and a resolution was passed, suggesting to the board that they have the files of the American Medical Journal bound. On motion, Society adjourned to banquet hall and listened to a paper by Dr. Ludwig Hektoen, of Chicago, on *Infection Carriers.*

F. P. DOHEARTY, M. D., *Secretary.*

## ROCK COUNTY MEDICAL SOCIETY.

Meeting of February 25th.

Rock County Medical Society held a meeting on February 25th, at the city hall at Janesville. Following is the program: *Pathology and Diagnosis of Acute Surgical Diseases of the Abdomen,* Dr. D. R. Connell. *Fracture of the Patella,* Dr. C. H. Sutherland. *Gastro-Intestinal Antisepsis,* Dr. James Mills.

Meeting of March 25th.

Rock County Medical Society held an open meeting at the opera house at Beloit on March 25th, at which Dr. Vaughn of the University of Michigan delivered the principal address of the evening.

The meeting was a district meeting, and physicians from six Wisconsin counties were present.

Dr. Vaughn spoke on *The Influence of Disease on Civilization,* and dealt with his subject from a purely popular standpoint.

## SHEBOYGAN COUNTY MEDICAL SOCIETY.

The annual meeting of the Sheboygan County Medical Society was held on March 6th at the office of Dr. G. H. Stannard, and the following officers were elected: President, Dr. G. H. Stannard, Sheboygan; Vice-President, Dr. C. W. Nutt, Plymouth; Secretary-Treasurer, Dr. W. F. Zierath, Sheboygan; Delegate, Dr. F. Knauth, Kiel; Alternate, Dr. J. R. Kingsley, Sheboygan; Censor, Dr. William Van Zanten, Sheboygan.

About twelve members were present. Forty of the fifty-five physicians in the county are members of the society.

## WALWORTH COUNTY MEDICAL SOCIETY.

WALWORTH COUNTY MEDICAL SOCIETY.

The annual meeting of the Walworth County Medical Society was held at Elkhorn on February 1. Secretary's report of the previous meeting and the Treasurer's financial report of past year were read and approved as read.

Election of officers for the ensuing year resulted as follows: President, Dr. H. C. Miller, Whitewater; Vice-President, Dr. H. N. O'Brien, Darien; Secretary-Treasurer, Dr. M. V. Dewire, Sharon; Delegate, Dr. Ralph E. Rhue, of Lake Geneva; Alternate to be appointed by the Secretary; Censor for three years, Dr. Geo. H. Young, of Elkhorn; other Censors, Dr. J. C. Reynolds and Dr. Ella Chaffee-Fay, of Whitewater.

The regular program, a *Symposium on Prostatic and Bladder Troubles*, was then taken up and discussed freely.

Two new applications for membership were received, Drs. M. J. Kenny and A. M. Tweedie, of Elkhorn.

It was decided to try monthly meetings at the various towns throughout the county during the season of good roads, and to make an effort to get speakers from out of town for these meetings.

Councilor Windesheim, of Kenosha was in attendance.

M. V. Dewire, M. D., Secretary.

---

**Manual of the Diseases of the Eye.** May, Charles H., M. D., New York. Seventh edition, with 362 original illustrations, including 22 plates, with 62 colored figures. 407 pp. New York, William Wood & Company, 1911.

The usefulness of May's manual, which has become a favorite with the student and general practitioner for whom, according to the original plan, it was intended, is attested by the constantly renewed demand for new editions, seven in eleven years, and by the fact that it has been translated into seven foreign languages. In presenting the seventh edition the author states that every page has been carefully examined, many alterations have been made, and numerous paragraphs added on subjects such as trachoma bodies, Lagrange's operation for glaucoma, the use of salvarsan in syphilitic ocular affections, injection of tuberculin, Kroenlein operation, and ocular manifestations of general diseases. By using different kinds of type orientation is greatly facilitated. Paper, print and the numerous black and colored illustrations are very good. The book conveys a vast amount of information in a very concise form and has our hearty recommendation.

C. Zimmermann.

---

## THE ASSOCIATION OF COUNTY SECRETARIES AND STATE OFFICERS OF THE STATE MEDICAL SOCIETY OF WISCONSIN.

W. F. ZIERATH, M. D., Sheboygan
President.

M. V. DEWIRE, M. D., Sharon
Vice-President.

ROCK SLEYSTER, M. D. Waupun, Secretary.

NEXT ANNUAL SESSION, WAUSAU, 1912.

**Under this heading will be published each month, papers, editorials, sermons, reports of meetings and all that relates to the County Medical Societies of the state. To it all are invited and asked to contribute, especially the County Secretary. It is yours—make good use of it, and may it be of help to every County Society. It will be edited by Rock Sleyster of Waupun, secretary of the new association, to whom all communications for this department, reports of meetings and news matter should be addressed.**

## COMMUNICATION FROM A SECRETARY.

Every County Secretary has troubles of his own in making up programs, securing members to take their respective parts, and in getting a reasonably fair attendance out to hear and participate in the programs he has spent his time and forethought in arranging. If in addition to this he has left a good days work behind him to be done after his return home that night, and gone thirty miles or more, by a devious route to attend that meeting, consuming three-quarters of the entire day, he has had good reason to have some feeling about the matter.

But most of our secretaries are gifted with "gumption" and keep coming back "serenely", whether the previous meeting has been an entire success or not. Witness the way in which one of our Secretaries treated such a disappointment after taking a new member the entire distance with him to take part in the meeting. The rather peculiar smile, which overspread the faces of a goodly number of the members, at the next regular meeting when these "minutes" were read for approval, made the secretary think it would be some time before he would be disappointed in that way again.

"The November meeting of the X—— County Medical Society

was called to order for a preliminary meeting in the dining room of the County Seat Hotel. Here the members of the Society enjoyed a good thawing out, and a great feed, before taking up the more serious operations of the day.

After dinner the Doctors adjourned to the Courthouse where, in nicely warmed rooms and among select company, the meeting was called to order in due form.

On motion, duly seconded and carried, the reading of the minutes of the last meeting was postponed until the next meeting. There being no further business, the regular program was then taken up as follows:

The 'Clinical Case' of Dr. A—— proved a very interesting one, in as much as it was necessary that the Doctor be on hand at the proper moment to tell the anxious mother whether her child was a girl or a boy, was all O. K., or blemished, the hour and minute of its birth, whether it looked like its Father, its Mother or the Doctor, and answer the many other anxious inquiries that are usually made at such important events. At any rate the case was so interesting that the Doctor telephoned us at the last minute that he could not be present to tell us about it.

The 'Clinical Case' of Doctor B—— was another very interesting one. The Doctor has been running opposition to some of the 'isms' over in his section (naturally), that is, they furnish the patients and he furnishes the pills and tells them they are well, and "Lo and behold" they are well, and the Doctor is the richer by some shekels for attending to business and keeping his own council about it. We had hoped to hear of some of his experiences at this meeting, but there was 'nothing doing', so we judge he was 'attending to business at the old stand'.

The 'Clinical Case' of Doctor C—— was another very interesting case. The Doctor had been attending a case of Brain Tumor that had become somewhat noted throughout his part of the County, had been the rounds of the neighboring M. D's., been to Rochester and operated upon and returned home to his care. Had been under his charge for three months now, and was still alive. We had hoped to hear all about this case but at the last minute the Doctor had simultaneous calls from F——, D——, E——, and A——, and it was impossible to attend to business and to the meeting at the same time, so this interesting case remains to be reported at some future time.

The 'Paper on Prostatic Troubles' seemed to be worrying Doctor D——, at any rate he had another engagement and could not be with us.

Doctor E—— was bothered with 'Incontinence of Urine', presumably, at all events his paper on that subject had to go over until another meeting because of his absence.

The paper on 'Enuresis Nocturna' was present but because of its being the maiden effort of its author, and because of the selectness of the crowd, he was excused until some future time.

The meeting was concluded by adjourning in a body and calling on the ex-President of the Society, Doctor H——, who because of age and the infirmities attending it, has become a sort of a shut-in. We enjoyed a very pleasant half hour with the Doctor and then returned to our respective homes.

In short, we should have pronounced this meeting 'One Grand Fizzle' had it not been for this visit with the Doctor. It served to remind us that 'Our days on earth are short' and that it will be far better for us to be brotherly and neighborly, and thoughtful of each other's interests, even at a sacrifice of some business and a few shekels, for it will be but a few years at best until many of us have reached the point in life, that our Honorable ex-President has. May we all reach it with just as much credit to ourselves, and then submit to it just as gracefully.

M. V. D.

---

## BOOK REVIEWS.

**Handbook of Physiological Optics.** H. von Helmholtz. 3rd edition, supplemented and edited by A. Gullstrand, J. von Kries and the late W. Nagel. 2nd volume. The Doctrine of Visual Sensations. Edited by W. Nagel and J. von Kries. 391 pp. with 80 illustrations in the text and 3 plates. Leipzig and Hamburg. Leopold Voss. 1911. 16 Mk. $4.00.

With regard to the general plan and principles according to which the new edition of Helmholtz's famous work was prepared we beg to refer to our reviews of the first and third volumes in the Wisconsin Medical Journal (March, 1911, p. 630 and September, 1911, p. 242). The appearance of the 2nd volume was delayed on account of the illness and death of Prof. W. Nagel. His unfinished work was completed by J. von Kries.

The 2nd volume contains the unaltered text of the first edition by von Helmholtz, on the doctrine of the visual sensations, with the following additions by W. Nagel: The excitation of the visual nervous apparatus by Roentgen and Becquerel rays. Roentgen rays are able to elicit the sensation of light in the eye provided that it is dark adapted. The shine of light is generally diffuse, but sharply defined if the rays impinge on limited portions of the retina. Hence the rods are probably the organs of perception for the

stimulus of Roentgen rays. Since the fluorescent and the light percipient layers of the retina lie very close together or even partly coincide, the perceptibility of the Roentgen rays may, from this point of view, be ascribed to the fluorescence of the retina. There can be no doubt, that the action of the Becquerel rays, emanating from radium, on the visual apparatus takes place through fluorescence of all transparent parts of the eye, including the retina.

The fluorescence of the retina, if exposed to ultraviolet rays, is considerably greater when the retina is bleached by light than when it contains visual purple. This is considered under the next addition by N., on the changes of the retina through the action of light, viz., the changes of the microscopic aspect of the retina, especially the phototropic migration of the pigment and the contraction of the cones, the bleaching of the visual purple and the electro-motor phenomena in the eye. As to the interpretation of the movements of the retinal pigment and the cones upon stimulation by light, N. recommends great caution, as neither process has been proven beyond doubt in the human retina, and mammals scarcely present these phenomena, at least much less than fishes and amphibia.

Then follows an excellent chapter of 70 pages on adaptation, vision in subdued light and the theory of duplicity, topics to the elucidation of which Nagel and his pupils largely contributed by valuable original investigations. The theory of duplicity is discussed with regard to the question how far the differences in the excitability of the rods and cones, which the theory of duplicity asserts, can be brought in accordance with certain anatomical, physical or chemical properties of the elements sensitive to light. N. considers it not probable that the pigment as such has anything to do with the formation of visual purple, since purple is found abundantly in pigmentless albinos and in the parts of the retina of the cat devoid of pigment. The significance of the pigment rather seems to be merely optical for preventing lateral diffusion of light in the layer of rods. But it remains unexplained why in some classes of animals this protective apparatus shows such marked reactions to light, in others, not.

The last 40 pages are occupied by a supplement by J. von Kries on normal and anomalous color systems and the theories of light and color senses, in which a splendid expose of the laws of light mixture is given for normal color systems and their reduction forms, so termed by von Kries, viz., the bichromatic and the trichromatic systems.

The critical discourses on the various theories of light, sense and color perception is most interesting. v. K. says that the theory of Helmholtz has remarkedly held good, even after the present, very amplified, state of our knowledge with reference to the laws of light mixture, on which it was originally based. The intelligence that the optical equations are a decided criterion for the characterization of the visual organs, the consequent discrimination of the various forms of the visual organ of those with normal color sense, the two kinds of dichromatic (color blind), and the too weak in color (anomalous), and the possibility of defining the mode of seeing of each and their differences, seems to v. K. the most important result of the more recent researches.

An alphabetical index of subjects to all three volumes is appended.

With this volume the 3rd edition, which brings von Helmholtz's monumental work up to date, has been completed and will be received with enthusiasm all over the world. C. ZIMMERMANN.

---

**History of Ophthalmology.** HIRSCHBERG, J., Berlin. Graefe-Saemisch, Handbuch der gesamten Augenheilkunde, 2nd, entirely new edition continued by Prof. C. Hess, Wurzburg. Nos. 213 to 218, 440 pp. with 20 figures in the text and 9 plates. Leipzig. Wilhelm Engelmann. 1911. Subscription, $3. Single, price, $4.50.

In this installment of 440 pages, provided with a table of contents, H. continues the third book of his history, the ophthalmology in modern times, as represented by the eye surgeons of Germany from 1800 to 1850. His efforts to be as accurate and complete as possible were greatly aided by written communications, especially extracts of lecture catalogues by professors of ophthalmology, deans of the medical faculties of German Universities and others, which is gratefully acknowledged. H. says: The brilliant example of Vienna found in Germany during the first half of the nineteenth century, a somewhat slow and hesitating imitation, and ophthalmology did not at once attain the liberty and independence necessary for its full development. Mostly it was taken care of and taught by the professors of surgery.

The lead was taken by the famous University of Goettingen, founded in 1734 by the elector George II, where the celebrated professor of surgery, A. J. Richter, after fighting in vain for ten years, finally in 1781 obtained the foundation of a small academic, medico-surgical hospital of sixteen beds, also destined for the admission of eye patients, in which after his death, Carl Himly and Martin Langenbeck worked.

A portrait shows Carl Himly, assisted by C. G. Th. Ruete, in the act of performing a reclination on a patient. Himly's greatest merit was the edition of the first journal of ophthalmology, the "Ophthalmological Library," 3 Vol. from 1802 to 1807, and continued later, 1816 to 1819 as "Library for Ophthalmology." He introduced the word "ophthalmologie," as "the comprehensive doctrine of the eye in healthy and morbid conditions." His most important work was "the paralysis of the iris by local application of hyoscyamus and its utilization in the treatment of some eye diseases," which was the first exact systematic essay on artificial dilatation of the pupil in the literature of the world.

Here Hirschberg annexes a brief history of the mydriatics and their employment, and, after discussing the "symbolics of the human eye in the healthy and morbid condition" by Ruete, adds a complete literature of semiology of the eye which formerly played such an important part.

In 1835 Bernhard von Lagenbeck (with portrait), later from 1838-1882 at Berlin, the most celebrated German surgeon of his time, published at Goettingen two excellent papers, his thesis for the Doctorate: On the finer structure of the retina and his habilitation essay: On glioma of the retina.

Then follows the history of the Berlin school, with Carl F. Graefe, who published the first repertory of ophthalmological prescriptions. J. C. Jüngken, Rust, the genial J. F. Dieffenbach, the master of plastic surgery and the first performance of squint operations after their invention by L. Strohmeyer.

Here are inserted the interesting chapters on the history of blood letting in eye diseases; leeches and venesection, narcosis and local anesthesia, blepharoplasty and operations for squint, with a full discussion of the claims for their priority, bibliography and nomenclature, and on the enucleation of the eyeball devised by Ferral and Bonnet.

In giving the history of ophthalmology in the University of Halle, one of its pupils, Carl von Basedow, is presented and his publications, in 1840, on the disease named after him. With regard to questions of priority, H. says: Flajani showed the way, Parry has the priority of having first described this new disease, Graves rediscovered and described it more accurately. Basedow rediscovered it and gave the first complete description of it.

T. W. G. Benedict (born 1785) at Breslau, first called attention to the etiological relation of diabetes to cataract. Here Hirschberg gives a history of diabetes and the diabetic disturbances of the visual organ, and, in connection with the discovery of pupillary disturbances by Philipp von Walther, professor at Bonn, a brief historical discourse on pupillary symptomatology.

Next to Dieffenbach and von Walther, F. A. von Ammon, at Dresden has done the most for the promotion of ophthalmiatric art and science in the first half of the nineteenth century. His publications on epicanthus, symblepharon, strabismus, iritis, embryology and congenital disorders of the eye are of permanent value. He devised the rhinorrhaphy, canthoplasty and tarsotomy, and founded the "Zeitschrift für Ophthalmologie," as set forth in detail.

It would lead us here too far to follow H. in his fascinating narration on ophthalmology and its teachers at all the other German Universities. Interspersed are, generally in connection with special achievements of one or the other eye surgeon of that period, special chapters on fever in eye diseases, history of congenital defects of the eye, glaucoma, intraocular animal parasites, staphyloma, specific ophthalmias.

In a retrospect H. quotes the rather flattering opinions of Himly, Ammon, von Walther, Chelius and Warnatz, of their own achievements, without entirely agreeing with them. But he emphasizes that we owe to these German surgeons and oculists of the first half of the nineteenth century in building up modern ophthalmology, more than one finds mentioned in most of the presentations of today. Therefore, it was necessary to study the sources. "On the whole, these professors of surgery complied very satisfactorily with their duty, to represent ophthalmology in practice, doctrine and researches, as a part of surgery, according to the state of science and external conditions. At the time of reformation when younger investigators devoted themselves exclusively to ophthalmology, they, with very few exceptions, promoted these and helped them to early independence. The resistance came not from the faculties, but from the governments, and especially the scantiness of appropriations. Not until 1873, i. e. three years after the death of Albrecht von Graefe, the victory in Prussia and Germany was completed."

C. Zimmermann.

---

**Progressive Medicine,** a Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences, edited by H. A. Hare, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical

College, Philadelphia, assisted by Leighton F. Appleman, M. D., Instructor in Therapeutics, Jefferson Medical College, Philadelphia. Vol. IV. December, 1911. Lea & Febiger, Publishers, Philadelphia and New York. Price, $6.00 per annum.

Vol. IV of Progressive Medicine contains: Diseases of the Digestive Tract and Allied Organs, The Liver, Pancreas, and Peritoneum, By R. S. Lavenson, M. D. Diseases of the Kidneys, by John Rose Bradford, M. D., F. R. C. P., F. R. S. Genito-Urinary Diseases, by Charles W. Bonney, M. D. Surgery of the Extremities, Shock, Anesthesia, Infections, Fractures and Dislocations, and Tumors, by Joseph C. Bloodgood, M. D. Practical Therapeutic Referendum, by H. R. M. Landis, M. D., and is of the usual high standard which we have become accustomed to expect of this publication. The article by Dr. Bloodgood and the Practical Therapeutic Referendum by Dr. Landis are deserving of especial praise.

The great value of this publication is that it gives much more than an abstract of the work done in these departments of medicine during the current year; it presents an appraisal by a competent authority of the year's progress and so economizes the reader's time by presenting for his consideration only what is important, supplemented throughout by judicious editorial comment.

Progressive Medicine is the best sort of a perennial post-graduate course, and we hope the number of its readers may steadily increase.

---

**A Manual of Clinical Diagnosis by Means of Laboratory Methods.** For Students, Hospital Physicians and Practitioners. By CHARLES E. SIMON, M. D., Professor of Clinical Pathology and Experimental Medicine in the College of Physicians and Surgeons, Baltimore. Seventh edition, enlarged and thoroughly revised. Octavo, 780 pages, with 168 engravings and 25 plates. Cloth, $5.00 net. Lea & Febiger, Philadelphia and New York, 1911.

The new edition of Simon's Clinical Diagnosis brings before us a work entitled to unreserved commendation. Dr. Simon has an unusual gift of clear description, which is well supplemented by plates of great excellence and a large number of engravings selected with care and discrimination. The beautiful plates and the lucid description of the cycle of development of the malarial parasite in man and the mosquito are particularly interesting.

The descriptions of the Widal and Wassermann reactions are examples of clear exposition which might well be studied by every medical writer.

The work is compact, yet comprehensive, while all that is useless has been eliminated. It is well-balanced for the author has not allowed his enthusiasm for any particular department of laboratory work to run away with his discretion.

A new and distinctive feature which has been introduced in the present edition is the addition of a wholly new section occupying nearly half of the work giving the laboratory diagnosis of each disease, arranged under its name in alphabetical order, so that the reader desiring to compare a case with the diagnostic picture of a disease can at once find it given systematically and connectedly, instead of having to piece it out from scattered sections as heretofore. The ease of thus utilizing precise methods is obvious. The

previous edition, consisting entirely of methods, has been thoroughly revised and condensed into the first section of this new edition, so that the physician and student now have at command in a single volume the whole subject ideally completed. The two parts are cross indexed, so that the reader can use the book in either direction, whether he desires to proceed from methods to their application, or from the diagnostic pictures to the methods of making the various tests. This new edition therefore bridges for the student the hiatus between the laboratory and the bedside, and it serves the physician equally well in stepping in the opposite direction, from his actual cases to the methods of accurate diagnosis.

---

**Electricity:** Its medical and surgical applications, including Radiotherapy and Phototherapy, by Chas. S. Potts, M. D., Professor of Neurology, Medico-Chirurgical College, Philadelphia. With a section on Electrophysics by Horace Clark Richards, Ph. D., of the University of Pennsylvania, and a section on X-rays by Henry K. Pancoast, M. D., Professor of Röntgenology in the University of Pennsylvania, Medical Department. Pp. 509, with 356 illustrations and 6 plates. Lea & Febiger, 1911.

In this very creditable book, the author presents the most recent advances in the application of electricity to diagnosis and treatment. In handling his subject, the author has adopted the very excellent plan of discussing the various therapeutic actions and methods of application from a medical rather than from a physical standpoint. Thus for instance, in discussing the action of the electric current on metabolism, the action of all modalities on this process have been grouped. The result is a treatise which presents the subject of electricity from the standpoint of its clinical uses, instead of the usual arrangement found in books on physics, which bring in the medical applications incidentially and in a disconnected manner.

The methods of application are fully and clearly described. After reading the discussion upon any one of the several diseases, the physician has clear ideas upon the application of the various electrical procedures and the results that may be expected.

The present work is no exception to the observation that books are often the means of keeping alive practices and opinions long out of date. For example, on page 391, the author seems to sanction the application of electric currents in the treatment of ectopic gestation, provided the diagnosis is made early enough. We venture to assert that no reputable surgeon would countenance such a procedure for a single instant.

The section on X-rays is clearly and logically presented. It could be improved however, by the incorporation of some X-ray prints of the lesions more difficult of diagnosis, such as Osteomyelitis, Aortic Aneurysms, Mediastinal Tumors, and Dilated Hearts. A serious omission is the absence of a table or paragraph giving the approximate age at which union of the various epiphyses occurs in childhood.

Upon the whole, the book is a useful and timely addition to the literature upon the application of electricity to the diagnosis and treatment of disease. From a mechanical standpoint, the book is a credit to the publishers. The type is clear and the illustrations are well executed.

R. J. G.

**Great Men.** Studies on the biology of genius. OSTWALD, WILHELM, Groos-Bothen. Leipzig. Akademische Verlagsgesellschaft m. b. H., 1910.

In the first of these thirteen lectures the celebrated author tells us that the incentive to his study of the biology of great men was a question by one of his Japanese pupils, how future eminent men could be early recognized. The fact that a not small number of Ostwald's pupils of international extraction turned out later as eminent scientists, his more or less close acquaintance with all prominent contemporaries of his special scientific field and his intimate friendship with some men of the first order, which gained a certain ethnographic variety by his longer sojourn among the scientific circles of the United States and his repeated visits with his English colleagues, afforded him abundant and many-sided material of observation. This was the base for his psychographic reconstruction, which he here attempts on the great masters of science of the last few centuries. As much as possible the personal utterances of great men, especially their letters served as sources. Here is the point, the author says, where we learn to understand the great man as human being and where we can get a glimpse into the work shop of his mind if he does not reveal this to the reader in his published works.

The biographies of Humphry Davy, Julius Robert Mayer, Michael Faraday, Justus Liebig, Charles Gerhardt, Hermann Helmholtz are given as prototypes for O.'s investigation of the following points: Conditions of the genesis and education of the future great man, the conditions of his work and its reflection on himself, finally the general course of his curve of life. The last six lectures set forth in detail the conclusions drawn by the author with a discussion of the present school system. The elaborate work will be read with intense interest and profit and deserves the widest circulation.—C. Zimmermann.

---

**Practical Medicine Series.** Vol. 9, series 1911, Skin and Venereal Diseases and Miscellaneous Topics, edited by W. L. Baum, M. D., and Harold N. Moyer, M. D., pp. 232. Price, $1.25.

Vol. 10. Nervous and Mental Diseases, edited by Hugh T. Patrick, M. D., and Peter Bassoe, M. D., pp. 236. Price, $1.25. Price of the series of ten volumes, $10. The Year Book Publishers, 40 Dearborn Street, Chicago.

These volumes of a handy size and attractively arranged for the student and busy practitioner, are replete with suggestions of the best practice of the day. The material of the volumes consists almost entirely of abstracts of important recent articles, in each case giving the reference to the original article. The ground is covered with great thoroughness, so that these books present in condensed form what has been done during the year that is really good.

By means of this excellent series of books it is possible for the general practitioner to keep in touch with medical progress in all its directions, an undertaking which the growth of medical literature has rendered an impossibility without such an aid. The judicious editorship of the entire series and of the individual volumes eliminates most of the superficial and unsound in current medical literature and presents the articles of real value in a form full enough for satisfactory use.

# THE WISCONSIN MEDICAL JOURNAL

APRIL, 1912.

## ORIGINAL ARTICLES.

### *RELATIVE VALUE OF DIURETICS.

BY A. S. LOVENHART, M. D.,

PROFESSOR OF PHARMACOLOGY AND TOXICOLOGY, UNIVERSITY OF WISCONSIN

MADISON, WIS.

The subject of this paper was suggested by class experiments performed by the medical students in the University of Wisconsin in the course of their work in pharmacology. We divide the class into groups of four, and each group is given an animal on which to work.

In the experiments on the diuretics we usually employed a rabbit weighing about two kilos. After being weighed it was given a dose of chloral as an anesthetic. Following this the rabbit is tied down and ether given during the operative procedures. When the rabbit is under the anesthetic a canula is placed in the trachea. Canulas are also placed in the carotid artery, the external jugular vein and in the urinary bladder. The injections are all made into the jugular vein and the blood pressure and pulse recorded by connecting the canula in the carotid artery with a mercury manometer. The bladder canula is filled with water. The kidney secretion is then collected for periods of ten minutes. Two or three periods are required to find the normal amount excreted by the animal under the conditions. It varies ordinarily from one to ten drops of urine in the period of ten minutes.

When the normal rate of secretion is ascertained the injection of the diuretic series begins. Among the diuretics we have used may be mentioned theobromine sodium salicylate and theophyllin sodium

*Read at the Sixty-Fifth Annual Meeting of the State Medical Society of Wisconsin, Waukesha, June 8, 1911.

acetate (theocin sodium acetate), a solution of calomel, and in some experiments we have used extracts of the pituitary gland. Finally, the various members of the saline series of diuretics were administered. Among these we have chosen sodium acetate, sodium sulphate and sodium nitrate.

After giving the drug, the urine is collected for 20 or 30 minutes, or more, in 10-minute periods, until the secretion returns nearly to the normal, and then the next injection is made. The students then plot their results, and express, by means of columns on plotting paper, the extent of the secretion. Usually they take a small square on the plotting paper as representing from one to ten drops of urine, and this represents the normal secretion. The secretion under theobromin may increase two and one-half times, the secretion under theophyllin sodium acetate usually increases four to six times more than under diuretin. The secretion under calomel (dissolved in sodium thiosulphate solution) is still greater, and finally the most rapid secretion occurs under the saline diuretics. Frequently when the excretion has not exceeded one drop in ten minutes at the beginning of this experiment, we may have as much as 10 or 20 cc. secreted in ten minutes under the diuretics.

The results are very striking, and we nearly always obtain marked diuresis.

To be able to bring about such a diuresis in human beings would be a matter of greatest import in many cases.

I might say a word about these various classes of diuretics. Among the most powerful organic diuretics are those of the xanthin series, which you will remember are purin derivatives related to uric acid. Caffein is trimethyl xanthin. Caffein is useless as a diuretic on account of the widespread character of its action. It causes insomnia, and it has so many effects that it is practically useless as a diuretic unless combined with some drug depressing in its action on the circulation and central nervous system, such as chloral. Caffein has been replaced by theobromin and theophyllin. Theobromin is 3, 7, dimethyl xanthin. Theophyllin is also a dimethyl xanthin, but the methyl groups are in different positions. It is 1, 3, dimethyl xanthin. Theophyllin, in our hands, is at least four or six times as powerful a diuretic as theobromin. The Farbenfabriken of Elberfeld Company make a substance under the name of theocin sodium acetate which has been used a great deal as a diuretic. Some clinicians have been disappointed in the results with it, probably for

the reason that they have used free theocin instead of theocin sodium acetate. The former is very insoluble and irritating to the stomach, and is very unsatisfactory, whereas the theocin sodium acetate combination is quite soluble and is a far better substance to use than theocin itself.

I will refer briefly to the advantage of intravenous therapy in connection with diuretics. By this method of administration the drug reaches the kidney in full strength, and its action begins at once or almost at once. All irritating effects on the stomach and intestine are obviated. Theocin sodium acetate, urea, and certain of the saline diuretics all lend themselves very well to intravenous administration because they yield clear solutions they can be boiled and sterilized, and they do not produce any precipitates with blood, nor any change in the formed elements of the blood; they do not injure the intima of the vessels, and there is no danger of thrombosis. Hence these drugs are well adapted to intravenous therapy.

In regard to previous suggestions of the intravenous use of diuretics, it is suggested by Loewy that sodium sulphate would be a good intravenous diuretic. So far as I know, it has never been so used in the human being in this manner.

The clinical work that has been done on these diuretics so far, is very slight, but with regard to the dosage to be used, I have made out a list beginning with safe doses, and in any important case the physician could increase the dose up to a certain point until diuresis is obtained. Theophyllin sodium acetate might be given at first in 3-grain doses intravenously with safety and increased as found necessary.

Urea is an excellent saline diuretic and can be given in doses certainly of 10 and possibly 20 grains intravenously, and in strong solution, as strong as 20 per cent of sodium acetate; 10 grains could be given safely intravenously. A similar dose of sodium sulphate could be safely given, although I have never used it in human therapeutics. Under all conditions the sodium salts are preferable to the potassium salts as diuretics. Frequently you will see potassium acetate used as a diuretic, per os without results, whereas if sodium acetate is used diuresis promptly results, the reason being that sodium salts are more readily absorbed from the intestine and do not have the depressing effect on the circulation that is noted when potassium salts are used.

In regard to the doses, Dr. Warfield can probably give you more

authentic information than I; he probably will have something to say about that.

In regard to the intravenous use of diuretics it might be urged that the continuous use of any drug by the intravenous method is a great disadvantage. Diuretics, however, are not drugs to be used for a great period of time. They are used only to tide over a crisis. The kidneys cannot be continually stimulated. Diuretics may have a bad effect on the kidney when given over considerable periods of time, and their use is seldom long continued. In case they are to be continued, certainly the intravenous route is not the route by which these drugs should be given. They should be given well diluted, by mouth.

I do not want to give the impression that the drug treatment of conditions requiring stimulation of the kidney secretion is most important. Paracentesis, venesection, sweating, giving large quantities of water and other methods of stimulating kidney secretion, such as cold baths in typhoid, are of prime importance and diuretics are of use only in tiding over a crisis.

With regard to the relation between the pathological condition and the choice of a diuretic, very little can be said at present, for the reason that we have only very unsatisfactory means of determining clinically the actual pathological condition with which we have to deal and the functional capacity of the kidneys in any given case.* Hence we have at present no data which would enable one to give any directions with regard to the choice of diuretics, in relation to the probable pathological lesion with which we are dealing.

Calomel is a superb diuretic. The Germans give calomel by mouth, and at the same time give opium to prevent the action of calomel as a cathartic. This, of course, enables much more of the calomel to be absorbed, and immense diuresis has been reported after calomel. It is possible to inject calomel dissolved in sodium thiosulphate intravenously, but it is not advisable to so use it in the human being until further experimental work is done on the subject.

With a view of making the injection of these diuretics safer, we have made a few observations on their effect on the heart. They increase the output of the heart per beat and per unit of time. The blood pressure usually remains the same under these various diuretics;

---

*The recent studies of Rowntree and Geraghty give great promise of a new and valuable functional test of the kidneys.

Journal of Pharmacology and Experimental Therapeutics, Vol. 1, p. 579 (1910); Jour. Amer. Med. Ass'n, Sept. 2, 1911, p. 811.

that is to say, there are no marked or constant changes in the blood pressure from their intravenous injection.

There are cases in which the saline diuretics have tended to decrease the secretion of urine, usually in cases which show a retention of chlorides, and to understand this it is necessary to state briefly the conditions of the action of diuretics. Diuretics act in the first place through the circulation by improving the circulation through the kidneys and increasing the amount of blood that flows through the kidney per unit of time, and also by changing the composition of the blood resulting in more or less marked hydremia. When the blood becomes concentrated by loss of fluid from the body, as in diarrhea and vomiting, there is a decrease or complete failure of renal secretion as the blood holds tenaciously to the water. Therefore, there is no urine secreted, unless there is a small excess of water in the blood, and all of the saline diuretics act by causing hydremic plethora. It has been proved that simple plethora, that is an increase in the circulating medium, will not cause a diuresis. One can transfuse blood from one animal to another and increase the amount of blood fifty per cent, without increasing the secretion of urine. There must be not only plethora, but hydremic plethora. The salts cause hydremia by the passage of water from the tissues to the blood; and hydremia has been proved to increase the flow of blood through the kidneys per unit of time. The mechanism for this is peripheral; it is not from the central nervous system; since this increased flow through the kidneys occurs after cutting the splanchnics and allowing sufficient time for the nerve endings to degenerate. It is a local mechanism which we do not understand, but the hydremia causes an increased flow of blood through the kidneys.

The simplest, and to me the most satisfactory conception of the action of saline diuretics, depends on this simple proposition, that the glomerulus does not offer resistance to the secretion of the crystalloid substances. The material passes out of the glomerulus into the convoluted tubule; and we believe the glomerulus offers practically no resistance to the passage of water and the salts, including urea. The glomerular fluid is alkaline and approximates the composition of the blood serum, except for the proteids. There is a selective absorption in its passage through the tubule. The urine becomes more concentrated and becomes acid in reaction. A diuretic may act by increasing the glomerulus secretion, or it may increase the amount of urine by decreasing the reabsorption in the tubule.

The saline diuretics apparently in addition to causing hydremia, resulting in an increase in the circulation through the kidneys, also decrease the absorption in the tubule.

In conditions where there is a chloride retention, either the glomerulus is holding back the chloride or there is reabsorption of the chlorides in the tubule, and under those conditions the injection of a saline diuretic will accordingly increase the osmotic tension of the fluid in the vessels, and tend to cause a greater reabsorption in the passage through the tubules, thereby lessening the secretion.

In cases showing chloride retention, we can understand that the saline diuretic may decrease rather than increase the secretion of urine.

I might say a word in regard to a rather new conception of the action of diuretics, and that is that after the material passes through the glomerulus into the uriniferous tubule, whatever salt reaches the lumen of the tubule will act as a diuretic in exactly the same way as the purgative salts act in the intestine. The salts, because of the osmotic pressure of their solution prevent the reabsorption of water in the tubule in the same way that they tend to prevent the absorption of water from the bowel. Recent work has shown a complete analogy between saline diuretics and purgatives, and just as in the intestine sodium chloride is less purgative than the sulphate, so is it also less powerful as a diuretic.

**Discussion.**

Dr. L. M. Warfield, Wauwatosa: The work that I have been doing with some of these diuretics is really in the nature of a preliminary report, because at present I cannot say anything very definite in regard to their action as a whole. However, I think we must at first take this point of view, that while experimentally in the normal animal one may increase the flow of urine by giving certain diuretics, when we come to use diuretics clinically, we do not use them on normal individuals; we use diuretics on individuals the subjects of some disease, usually a disease where there is a good deal of effusion of fluid into the serous cavities, and where the urine is more or less decreased. Our object in using the diuretic is to pass out through the urinary secretion as much fluid as is possible, in order to drain out the fluid from the serous cavities; so that while a diuretic may act very beautifully on an experimental animal, it may not, and really there is no reason as far as I can see to believe it is going to, act in the same way on a diseased kidney. Nevertheless, there are certain points brought out by the use of these drugs clinically that do show that given intravenously or sometimes by the mouth, they actually do increase the flow of urine. I have been using particularly urea and theocin sodium acetate. I started out by using urea in doses of from 3 to 4 grains, and finally I have used it in doses of 10 grains. I have found absolutely no ill effects on the patient from the use of 10 grains of urea. It is exceedingly

soluble in water. One grain of urea readily dissolves in one cc. of water. It can easily be sterilized. By making a slight compression in the upper arm with a piece of rubber tubing, or the hands of the assistant, and using a needle to inject into the median cephalic vein, it is not difficult to inject 10 cc. into the vessels of the arm.

I must say that I have not been able to show in the few cases that I have had any marked increase in the flow of urine following the injection of urea. In two or three cases which I had there has actually been a decrease in urine in the twenty-four hours following the injection of 10 grains of urea. I do not think, however, that that is a fair criterion to judge of the value of the diuretic, because we know that in measuring urine from a case, we will say, of valvular heart disease, where there is engorged liver, ascites, and edema, if one measures the urine day by day without drugging at all, giving the patient a definite amount of food to eat and water to drink, even a daily variation of a considerable number of cc. is noted. So that if we happen to give our drug on a day when the urine is going to be increased for some unexplained reason, we will get that increase, or if we give it on a day on which we might find a decrease we are going to find not so much of an increase, but a decrease of urine.

So that all these drugs, it seems to me, in order to have their value proven, must be given over a considerable period of time and a very large number of cases studied. This at present I have not been able to do, as I have not had the drugs in hand for a long enough period, but on the whole the impression I have gained is that urea given intravenously has not proved to be an exceptionally valuable diuretic.

Now, on the contrary, with theocin sodium acetate I have had some very interesting results. For instance, I have injected two and one-half grains of theocin sodium acetate into the veins of a man who has valvular heart disease and anasarca; the urine measured for four or five days previously being, we will say, from 250 to 350 cc. daily; in the twelve hours following the dose of two and one-half grains of theocin sodium acetate the urine has been increased to 650 cc. That is almost three times as much in the twelve hours following the dose as it was in any twenty-four hours previous without any diuretic. I have given theocin sodium acetate in doses as high as five grains and have seen no ill effects. There is this to be said about that drug, that it is not nearly so soluble in water as urea is. One grain of theocin sodium acetate must be dissolved in at least 2 cc. of water, and probably it is better to dissolve it in 2½ or 3; in order to give 5 grains it is necessary to give from 10 to 15 cc. At present I have found it possible to get it dissolved in 2 cc.; and the general impression I have gained from the use of this drug in about twenty cases in probably forty to fifty injections is that theocin sodium acetate is an exceedingly valuable diuretic when given intravenously. Unfortunately I have not had any cases yet with complete anuria, where I have been able to try the drug out to see whether it would force the kidney to excrete urine—such cases as follow operations on one kidney, where the other kidney ceases to secrete. All my cases have been cases of chronic nephritis, or valvular heart disease. On one or two cases of typhoid fever I have tried it, but the results have not been at all conclusive.

I have given theocin sodium acetate also by mouth, and I prefer it to diuretin.

So that, in conclusion, so far as I have been able to find out in the few experiments I have done, urea is not so valuable a diuretic as theocin sodium acetate. The theocin sodium acetate may be given safely in doses of 5 grains —perhaps more, for all I know—but in my experience 2½ to 5 grains has been quite sufficient, and both intravenously and by mouth it has proved, in my hands, to be an exceedingly good diuretic.

DR. LOVENHART: In the laboratory we find theocin sodium acetate a better diuretic than urea, but 10 grains of urea is probably not a sufficient quantity to cause diuresis in the human being.

---

## ON HUMAN EUGENICS.*

BY FRANK I. DRAKE, M. D.,

MADISON.

The time has gone by when man was looked upon as the product of a special act of creation, when nature and nature's laws were fancied to be obedient to his will. No modern Joshua has commanded the sun and the moon to stand still "until the people had avenged themselves upon their enemies." No modern St. Peter or St. Paul has suspended nature's last great fiat and breathed the breath of life into the nostrils of the dead. In the lexicography of present-day science there is no such word as miracle.

Twentieth century science teaches us a different conception of man's place in nature. Man is a mammal. He ranks highest among mammals, to be sure, but he is possessed of the same framework, the same musculature, the same circulatory mechanism, and the same reproductive system as his fellow mammals of lower orders. With him the struggle for existence is as keen as with them, the law of the survival of the fittest is as fixed, and, what is most to the purpose, the laws of heredity are as hard and inexorable.

It is the purpose of this paper to call attention once more to the certainty of the hereditary transmission of certain types of defective nervous organization and to emphasize the fact that the laxity of our moral and civil laws on the subject of marriage is largely responsible for the increasing number of the insane, the imbecile, and the epileptic within our borders. "Who shall defend us from our ancestors," exclaimed James G. Blaine, suffering from an attack of gout. It would be surperflous to expound before this audience any of the theories of heredity whether of Darwin, of Weissmann, or of Spencer,

---

*Read at the 65th Annual Meeting of the State Medical Society of Wisconsin, Waukesha, June 9, 1911.

or to offer any evidence in support of this great natural law. It operates in the most highly organized as well as in the most primitive forms of life, in the animal as well as in the vegetable kingdom. It is so obvious in its operation that even the laity recognize it. Not a day passes that we are not impressed with its tremendous importance in shaping human life and human destiny. "Whatever is innate within us comes to us as a legacy from preceding generations" says Du Bois. We know it exists, we cannot escape it, yet we are not responsible for it. The physical and mental characteristics we have inherited from our parents, modified for good or ill by our environment, become a certain heritage for those that come after us.

In a report to the State Board of Control the late Dr. Gordon cited an instance of members of three generations of the same family in the Northern Hospital at the same time. Dr. Wilmarth notes the admission into the Home for Feeble-Minded of a harmless imbecile woman who had given to the world six unfortunate children before she was accorded the protection that should have been hers from childhood. Thus insanity and imbecility, and drunkenness and epilepsy as well, are positively transmitted to offspring, though the family weakness may undergo transmutation of form with transmission to succeeding generations.

Nor does the degree of mental aberration in one generation of necessity correspond with or influence its intensity in the next. Be a man ever so drunken, ever so sorely afflicted with epilepsy, ever so maniacal, in his so-called lucid intervals he may marry and stock the community with a sickly degenerate offspring. There is no law to say him nay. Under the absurd fetish of "personal liberty" public sentiment exercises but little restraining influence upon the marrying and giving in marriage of a large class of individuals physically and mentally unfit to propagate their kind. How long shall the strong arm of the law withhold interference? How long shall a long suffering public endure with patience? Is it right that these irresponsible or semi-responsible beings should be allowed to force upon children the infirmities under which they themselves suffer? Have unborn children no inalienable rights? Is it right to tax the people to provide homes and hospitals and asylums for the segregation of this growing army of unfortunates?

Of the methods suggested to reduce the number of these unfortunates the Indiana method of sterilization seems to be the simplest, most humane, and most economic. The most progressive men in and out of the profession are in favor of it, and it is time that

this association put its stamp of approval upon so important a measure.

However, to my mind, this is not the whole solution of this difficult question. Statutory law is notoriously inadequate to accomplish moral reform, nor is that its mission. Sterilization and sequestration help materially towards limiting the increase in the numbers of these degenerates. But such measures do not reach the high grade imbecile, nor the petty thief, nor the chronic alcoholic, nor the mildly paranoiac who pass on a defective nervous organization to their posterity. These are all potentially the parents of an unsound progeny, and just as the "street walkers" who pass for respectable women are the most prolific source of venereal diseases so these people at large are the most dangerous to the state, in that their influence is hurtful and their reproductive capacity fills our charitable institutions and puts an excessive drain upon the public exchequer.

In the face of such deplorable conditions an awakening of the public moral sense becomes imperative. The "Personal Liberty" idea needs reconstruction. Such a thing exists only in the abstract. In reality it is utterly chimerical. Economic, legal, and social coercions abound on every hand. Personal liberty does not consist of personal license; personal liberty stops short of infant damnation; personal liberty ceases to be personal when it encroaches upon the domain of our neighbor. As in all matters of moral reform, the sanest remedy lies in the education of the people—a thing that cannot readily be accomplished, for it involves the tremendous task of arousing the public from a slumber of indifference and inspiring their minds with wholesome ideas on race culture. It means to teach them how to build up a vigorous enlightened citizenship.

Our great public school system is performing this latter function admirably, but the former remains untouched and forgotten. For obvious reasons opinions are at variance as to the wisdom of attempting to teach matters of sex in our public schools. But as to the wisdom and propriety of teaching sex hygiene and eugenics to men and women there can be no shadow of doubt, for upon them devolves the important duty of rearing a vigorous progeny.

The modern science of eugenics "which has for its subject matter the improvement of the race through heredity" should receive attention commensurate with its importance. It is a subject of which the mass of the people is wholly ignorant and yet it is one whose practical application is as constant and as wide as human love and marriage. Human heredity with all its tremenduous consequences is today left to mere hap-hazard sexual selection. Wealth and social

position and titles of nobility, the allurements of uncritical minds, are often the garnishments that conceal a blighted generation. Health and beauty and vitality, moral worth and mental integrity are the proper objects of admiration and the essentials of perfect mating. Such a wholesome sentiment should have the support of an ardent conviction and, as Roosevelt points out, the force of a religious tenet or a duty of patriotism.

It would seem, too, that the way is now clear for disseminating our knowledge of these subjects. I take this opportunity of suggesting to the University authorities that, as a part of their extension work, lecturers be put into the field to teach human eugenics to the people of the state. Lectures upon this subject, delivered by competent men or women, as seems advisable, may be given under the auspices of various men's and women's clubs throughout the state, or at the little red school house, which promises soon to be the center of rural social life. Bulletins may be issued for free distribution or for a moderate sum at most. I venture the assertion that there is not a subject in the curricula of the State University that ranks this in importance from the standpoint of the individual or from that of the economic and social advantage to the state. I venture the assertion, too, that the eugenics of horses, hogs, and chickens receive their fair share of attention at this great institution, while the eugenics of man is passed over with scant notice or with none at all. Press reports a short time ago ascribed to Professor Alexander of the University the distinction of fathering an organization to promote interest in pure bred horses. No one questions the value and propriety of such a league, but how much more important is the study and practical application of the science of eugenics as applied to man. Indeed, the perpetuation of healthy human stock takes precedence of all other forms of conservation, and they are many and important.

I believe the people of the state are ready and waiting, aye, calling for this information. Americans are not slow to grasp any opportunity that promises returns in money or in health. Witness the readiness with which they seized the antituberculosis idea. Witness the crusade against child labor, the formation of societies for the promotion of sanitary and moral prophylaxis, and all these are but a step removed from the study and practical application of that science which Sir Francis Galton initiated and for whose advancement he bequeathed the half of his large fortune.

So I may say that nature is ever ready to stand sponsor for a healthy generation. Let us do our part. So long as we prefer the hectic flush to the ruddy glow of health, so long as we prefer a

plethoric bank account to moral worth and mental soundness, so long as we close our eyes, our ears, and our minds and wilfully frustrate the evident design of nature; so long shall the mentally and physically unfit be propagated and this colossal sin of parents be visited upon their children and their children's children even unto the third and fourth generation. On every hand are to be seen evidences of a desire on the part of the people to return to the old time Spartan vigor and vitality. From the first the State has for her own advantage assumed the responsibility of ministering unto the intellectual needs of her children. It is infinitely more her duty to conserve her productive forces, for this is to preserve the very foundation of her well-being and her perpetuity.

**Discussion.**

Dr. Margaret Caldwell, Waukesha: I do not know that I have anything to say on the subject that I can say in public. I have given much advice to mothers and daughters and particularly to daughters, and the necessity for some law is I think greater than it is for rabies, for it reaches further. A patient with rabies may die, but a patient who is infected from a bad mother or father does not die, but lives on eternally in his or her progeny.

I think the physician owing to his intimate relation in the family is the only one who can educate the parents into a closer confidence with their children and can teach the parents that what is natural in the animal is equally and modestly natural in the person, and so little by little as the child grows into more knowledge, teach them how to care for themselves and the consequences if they do not. As this subject is usually treated, parents act as if the child could understand all about the pet dogs, cats, chickens, and farm animals, but that the natural laws are unnatural and immodest in the human race.

Dr. P. F. Rogers, Milwaukee: In my opinion this paper does not need much discussion. Also in my opinion it is the most important paper that we have listened to in this convention. I listened with interest yesterday to the discussion of the paper on medical inspection of public schools, and particularly to Dr. Beffel's remarks as to the necessity of going further back than the inspection of schools, and inspecting the child in its infancy; and I made the mental comment at the time that to get at the root of the matter we must go further back than that, and Dr. Drake has touched the root of the matter; there is no question about that; the root of the whole matter of good health lies in the education of people in the subject of reproduction.

I want to compliment Dr. Drake on the beautiful way in which he has expressed the ideas that I have held for a number of years. I have looked into this matter considerably and have been more or less active before various meetings of both sexes in the City of Milwaukee in discussing the subject of eugenics with reference to marriage and veneral disease; but Dr. Drake has made the subject much broader than that, and I think has expressed the whole thing in a very clear and very concise form.

I hope sincerely I shall live to see the day when the public will wake up to a realization of the importance of this subject, when whatever legislation *can* be enacted to effect reform in this matter *shall* be enacted and rigidly enforced; but I believe that the doctor has struck the keynote of hope in his suggestion that the State University should be the agency through which information and knowledge on the subject of eugenics should be disseminated.

As I said before, I have studied the matter from the standpoint of marriage and venereal disease considerably, and have studied the various methods that have been adopted here, and particularly abroad in foreign cities for the limitation of the spread of those diseases, and the more I have read and studied the subject and thought upon it, the more firmly I have become convinced that legal regulation (of venereal disease at least) is absolutely powerless and useless. The most enthusiastic supporters of legal regulation in Europe have confessed to the absolute inefficacy of that method of control. It accomplishes virtually nothing in restricting the spread of venereal disease, and my opinion has long since crystalized on the one method, the one hope, *education* of the people, of all the people, not only adults but children, at the earliest stage in which they are capable of absorbing proper information on matters pertaining to sex and reproduction. I believe education is the only way in which we can hope for improvement in matters of reproduction, education along the lines of eugenics, and as I said before, I believe the doctor has hit upon the right plan. It is the duty and function, and one of the most important functions of all of our state universities, through their extension departments to disseminate knowledge on this subject.

As the doctor has so well said, and as we all know, millions are spent annually by every state government and the United States Government for the eugenics of hogs, cattle, chickens and horses, but not a cent for the improvement of the race. Is it not a shame, is it not a blot on our national intelligence? I think this society ought to go on record as favoring the adoption by our state university of an extension course on the subject of human eugenics. (Great applause.)

Dr. George E. Peterson, Waukesha: We have a man here who has made a study of the subject of eugenics, Dr. Plowman, Professor of Biology, Carroll College. He is not a member of the medical profession, but is a member of the allied profession, teaching.

Dr. A. B. Plowman, Waukesha: I was not expecting to appear before this convention, but I plead guilty to the charge of Dr. Peterson of being interested in this subject, and it has been my great pleasure and privilege to attempt to offer a course this year in Carroll College on the subject of hygiene and eugenics, and I wish to ask for your moral support in this work.

I have felt for a number of years that the place to begin on this subject is in the schools, and I have tried to act upon my belief, and I have begun in Carroll College, and we have had an interesting course—interesting at least to me—and my students have expressed a desire to go further in the study of the subject. I would like to say here that what Dr. Drake has been saying has been in my mind and I have been trying in a feeble way to say those things to my students.

I wish that this organization might stand back of the colleges of the state, might arouse an interest on the part of the teachers of biology of the

state, or rather encourage that interest; for let me assure you that the biology teachers are interested in the subject, and they would be glad if the physicians of the state would indicate some definite desire for instruction along those lines to be given to the students.

Dr. F. I. Drake (Closing): The only thing I desire to say in conclusion is to emphasize the idea of the University Extension Department taking up this work. That department has a wonderful opportunity to be of incalculable benefit to the people of the State in this work, and this society might stiffen the backbone of that department a good deal by the adoption of a resolution favorable to this scheme. Of course the resolution should be presented to the proper official of that department. I think we should take a definite stand in this matter.

---

# SOME OBSERVATIONS UPON INTRA-PERITONEAL INFECTIONS.*

BY W. E. FAIRCHILD, M. D.,

GREEN BAY, WIS.

Were one to undertake to write a history of Medicine and Surgery, giving to each subject an amount of space and attention proportionate to that it has occupied in the thought and writings of medical men, the historian would be astonished at the mass of error surrounding and obscuring the study of ailments due to infections of the peritoneal cavity, and, in the light of modern knowledge and demonstrable certainty, he would be amazed at the blind gropings of the bright minds of the medical ages. It is useless and unnecessary to discuss the many theories concerning peritoneal infections, advanced and defended until very recent years, especially in a paper, which like the present one, does not purport to present more than a resumé of present day opinions, together with reports upon a few cases of the writer, which can perhaps be looked upon as a very trifling addition to the work of those whose broader experiences have fixed for them, more or less definite lines of treatment for definite pathological conditions. In this connection a brief resumé of a few structural features of the peritoneum is of interest, inasmuch as we are enabled from their considerations to gather sound and convincing reasons for steps in treatment which might otherwise appear ridiculous. It will be unnecessary to refer to the anatomical formation of the peritoneum since you are all familiar with that,—but you

*Read at the Annual Meeting of the Fox River Valley Medical Society, Appleton, Wis., Feb. 1, 1912.

will pardon me for bringing to your attention a few physiological facts which may have escaped your memories.

The peritoneum may be looked upon as a vast lymphatic structure, so pregnant are its walls with lymphoid tissue, and it is not possible to conceive an inflammation of the peritoneum that is not essentially a lymphangitis. We are indebted to a member of this society, the late Byron Robinson, for the establishment of the fact that the pelvic peritoneum is poor in larger lymph channels, and stomata, though rich in capillary lymphatics. For that reason, absorption in the pelvis is slow and the blocking of the lymphatics by thrombo-lymphangitis, early walls off from the general circulation a pelvic accumulation. Because of this, pelvic peritoneal infectious processes are much less dangerous to the life of the patient than are those of the upper zones of the abdominal cavity.

The intestinal area contains many lymph channels and stomata, but it is particularly in the diaphragmatic region where the large stomata and abundant lymph channels open the gates so wide to infections occurring in that region, that they result in rapid fatalities in cases of pronounced virulence.

On the other hand, and for the structural reasons above mentioned, it astonishes one to observe the resistance which obtains in the pelvic area, and the surgeon may be excused for dilatory tactics which here would appear to be permissible, if not altogether warranted.

Fowler has divided peritonitis into—

1. Perforative; 2, Infectious; 3, Syptomatic; 4, Tuberculous; 5, Peritonitis, due to undetermined infections,—which latter embraces all cases in which the cause is unknown or cannot be traced.

Others divide and classify, according to the region affected. No classification is lucid, unless it takes into consideration (1) the origin, (2) the character, and (3) the location and extent of the pathologic process for you will readily agree that a peritonitis due to a surgical trauma, unaccompanied by infection, and limited to the pelvic peritoneum, would be very different in its results from one due, say, to streptococcus infection, covering a large area in the region of the diaphragm. While the one would almost certainly recover without anything approaching rational treatment the other would almost certainly die, even under the most scientific and enlightened treatment.

For these reasons, and many others, judgment upon any line of procedure, or conclusions from masses of honest statistics concerning

the efficiency of any line of treatment, may well be taken *cum grano salis*. Like the specifics for the eruptive fevers, remedies for peritonitis have been singularly short lived, and many persons have been sacrificed upon the altars of irrational and offending medical treatment. In recent years however, true advance has been made, and the advance commenced only when peritonitis began to be dealt with as a surgical affection. Fortunately in peritonitis it does not matter so much whether the cause is one or other of those that have been enumerated, the treatment is much the same, unless one elects to give no treatment at all, and I cannot call "Rest in a recumbent posture, with abstinence from food," "Treatment." A dog with peritonitis will adopt such a course, yet the veterinary scarcely deserves credit for its adoption. By "treatment" I mean something more than the guidance of instinct, something with a "raison d'etre."

Peritoneal infection is eminently a condition that demands something far away and beyond the inculcation of a lesson in patience. *It demands action.*

An extension from the appendix or gall bladder, a perforation of the stomach, duodenum, or colon, an invasion through the fallopian tubes, or a tubercular process extending from a primary abdominal focus,—these conditions are not intelligently met by the man who gives a turpentine enema (particularly if the distension is intra-peritoneal, which it is very apt to be), or by the other who gives salines, opium, intestinal antiseptics, and remedies ad nauseam.

There are two forms of peritoneal infection in which we are particularly advised to wait; namely, the gonorrheal form and the puerperal. Let us first turn our attention to the gonorrheal form. Here we have an extension of a Neisser infection from the vagina to the uterus, and from the uterus to the tube. No great amount of damage results, and the symptomatology is benign, until the infection of the tubal mucosa takes place. Then turgidity of the mucous membrane comes on and the tube becomes blocked at or near its uterine end. The pus accumulates and is forced toward the fimbriated end. When a drop is finally thrown out of the tube into the peritoneal cavity, a violent inflammation is set up. The pain is intense and the symptoms are so characteristic that a diagnosis can almost be made without the use of the microscope. We have a commencing peritonitis, due to a collection of pus, and we are asked to wait until it becomes sterile. It is true that this pus shows no great tendency to spreading infection over a serous surface, and that the great majority of such

cases end in the formation of a pus tube, or if the pus escapes somewhere,—into an occluded tube or one so deformed as to invite tubal pregnancy and other lesser evils. Very occasionally a case gets fairly well, and it is paraded as a shining example of the advantage of waiting. In no other pus producing condition are we asked to send a patient through a course of deliberate torture, and I believe we should not do so in this condition. These cases can be operated upon easily and safely when operated upon early.

Now in the puerperal infections we have to deal with desperate cases. Post mortem examinations of puerperal cases almost invariably disclose an abdomen full of pus. We, whose opportunities are limited, cannot speak with authority upon this question, but I venture to express my disbelief in the efficacy of any present day treatment. If you curette, you break through the guarding army of leucocytes. If the infection has reached the glandular system, if it has found its way to the peritoneal cavity, there is only one rational method of procedure, and that is to attack the trouble where it is making its advance.

While I do not decry the application of, say, iodine to the uterine mucosa—for I believe it to be a good treatment, far more efficacious, and less dangerous than a curettement, still, when it is used late in the attack—when the active infective process has passed to the parametrium, and beyond it to the glands of the broad ligaments—such treatment is about as efficacious as an attack upon a camping ground abandoned by the enemy twenty-four hours previous.

The question of a bacteremia is an important one, and blood cultures should be made. No operation should be attempted without it. The presence of virulent bacteria in the blood would negative operation.

The vaginal route may often be used for the relief of accumulations in the pelvis, and when relief cannot be obtained thereby, recourse should be had to abdominal section. In the majority of cases of so-called "cellulitis" it will be found that the trouble is in the adnexa.

Chronic recurring pelvic peritonitis means persistent, and continuing foci of infection which demand removal. It is well to remember that so-called sterile gonorrheal pus contains toxins whose absorption is dangerous (Landau), and before leaving this subject I wish to remark that I am not in sympathy with the species of ethical masturbation, known as "pelvic massage."

In no condition is it so important to make a correct and early

diagnosis as in peritoneal infections, and by reason of the pain, and of the multiplicity of invasion channels, it is harder to make a positive diagnosis than in any other diseased condition coming under the observation of the physician. Indeed, there is only one method by which one may hope to succeed, and that is by means of a prompt exploratory laparotomy. Failure, which will come but seldom, has its compensation in the possession of the knowledge of the absolute soundness of one's course.

In discussing treatment, I will pass by all of the theories and fancies of physicians and surgeons prior to the coming into the field, of Peasley, who, in 1871, fearing the evil effects of the "Red serous fluid," of contemporaneous writers, first advocated drainage of the abdomen. (Kelly's Surgery.) He practiced and advocated the opening of the cul de sac of Douglas, and irrigation through it. Previous to this time, the old clamp operation for ovariotomy, and the bringing into the wound of the stump after partial hysterectomy, had accomplished drainage, it is true, but the object of those procedures was the prevention of hemorrhage, and not drainage at all.

J. Marion Sims, in 1872, advocated drainage through the cul de sac of Douglas, as a routine measure, for the prevention of septicemia following operations within the abdominal cavity, and as this was before the days of aseptic surgery, you will readily concede that it was well adapted to a class of cases, in which post-operation infections were rarely absent, in reality a treatment for post-operative peritoneal infection, applied while the infection was being introduced.

The light began to dawn in 1875, when Schroder explained the pathology as being due to *infection,* upsetting the "red serous fluid" theory and explaining that the latter was harmful only when it was a nidus for infective processes. No discovery in abdominal surgery deserves a higher place, in our regard, than this plain statement. When in the early 80's the soundness of Schroder's claims began to be recognized, men like Olshausen, Zweifel and Kocher announced the abandonment of drainage in uninfected cases.

The most valuable contribution to the subject was probably that of Clark, who reviewed the 1700 Kelly cases, pointing out the dangers and uselessness of drainage. Clark's postural treatment we are now convinced was wrong, but we owe him a debt of gratitude nevertheless.

If Wegner's estimate of the absorptive power of the peritoneum is correct, viz.: that it can absorb from three to eight per cent of the entire body weight in an hour, it becomes easy to understand that

some method to inhibit this process is absolutely necessary to prevent the death of any individual whose abdominal cavity is filled with virulent fluid. If it is necessary to operate upon appendicitis within the first thirty-six hours, it is equally desirable to operate for other conditions that would result in the accumulation of undetermined amounts of septic material, especially in the face of the fact that absorption will rapidly take place if the fluid or septic material is under tension in the abdominal cavity, and added to this, there is a state of the system which favors absorption due to a deficiency of fluids in the tissues.

The fact that cases of peritonitis recover without operative intervention will be used as an argument against exploration and attempt at surgical relief, but a few years ago that same argument was used to support opposition to operative treatment of appendicitis, which only becomes dangerous when the septic process escapes beyond the confines of the appendix, and invades the peritoneum, throwing toxic material into the lymph channels. It is well to bear in mind that an inflammatory process in the peritoneum is not, per se dangerous, but that it is the production of poisonous fluid, which, gaining access to the lymph stream, acts, as would any other toxic agent, upon the vital centers, destroying life. The question of the prevention of such a possibility, then, is one that should receive our best attention, and, while we are all agreed upon the desirability of such a course, we are more or less divided as to the steps we should take, and the method we should adopt.

I think it can be laid down as a fact beyond danger of successful contradiction that the more experience a surgeon has, the bolder he becomes in the matter of closing the abdomen in the presence of an infective process. I mean one that has become sufficiently pronounced and developed to demonstrate its existence by the production of pus.

Just as the surgeons of the last quarter of the nineteenth century gradually reached the conclusion that drainage of the uninfected peritoneum is unnecessary, so are those of the first quarter of the twentieth becoming convinced that under certain, rather poorly defined conditions, the infected peritoneum will take care of itself.

The dangers of drainage are many; among which may be mentioned the danger of infection of the tract of drainage with germs other than those which originally made that region their habitat. Again, pressure of rubber or other drainage material, upon intestinal or other structures, particularly if near the line of suturing, may

result in fistulae from pressure necrosis. Again, prolonged drainage favors the formation of numerous and firm adhesions, as well as fistulae in the track of the drain. Further, it delays convalescence, and it predisposes to hernia. Its utility for a few hours is unquestioned, but drainage of the peritoneal cavity, as a whole is impossible. It is only in cases where there is an infected mass, subject to disintegration that prolonged drainage of it is useful. Outside of the peritoneal cavity every observing surgeon concedes the necessity of drainage of abscess cavities. The powers of the peritoneum over septic processes, when rightly conserved, are so great, and the dangers from indiscriminate drainage are so various and grave that one may be forgiven for falling into a state of mind bordering upon infidelity when its merits are lauded.

It is my own opinion that when I have succeeded in removing the original focus of infection, and have carefully sponged out the free pus and other debris from the peritoneal cavity, using care all the while to avoid useless traumatism and careless spread of the infective material over apparently clean surfaces, closure of the wound in the peritoneum, without drainage, will give me a greater percentage of recoveries than will intra-peritoneal drainage.

The removal of the offending mass must be thoroughly done. If it is from an acute appendicitis, not only the appendix, but the infected, attached omentum must also be removed. If the abscess is of the broad ligament, it is extraperitoneal, and will probably require drainage, just as would a nephritic abscess. Drainage in these cases is for the purpose of preventing the intra-peritoneal flow of an extraperitoneal accumulation.

In a purely intraperitoneal infection, where I would hesitate to close without drainage, I would hesitate to operate at all. In this category I would include those cases wherein the toxemia is so profound that any addition thereto will almost certainly bring about a fatal termination. It is scarcely necessary to say, that, where there is an opening into any viscus, or where the closure of such an opening is not such as to give a feeling of security, then a drain should be inserted.

Much has been written upon the merits and demerits of the different forms of drain. Personally I prefer a tubal drain of rubber or glass for the reason that it is more easily cleansed, and I believe it is more efficient. Gauze would be ideal, but for the fact that it is not ideal. In the abdomen it becomes incorporated with the tissues.

It is difficult and painful to remove, and when once it becomes saturated with the offending material, its vaunted capillary attractive power becomes nil.

In the placing of a drain the surgeon should study and take into account the direction the infection will take, and it should be placed in advance of the infective process rather than in the opposite direction. To make myself clear—a drain for an infected arm would be more wisely placed in the axilla than in the flexure of the elbow.

In operating upon abdominal cases, I believe great harm is often done by too thorough sponging. When an infection is working its way toward the peritoneal sac, nature throws out within the cavity a serous fluid—alkaline in reaction and containing numberless polymorphonuclear leucocytes—an ideal protective against the army of invasion. This fluid is too often sponged away, and with it the delicate epithelial lining of the cavity itself, converting a protected area into one wide open to invasion. If this crime of rape is completed by the addition of a permanent drain, one can see that the patient's chances of recovery have been reduced materially.

A wonderfully effective help to elimination of the toxins is found in the free use of the normal saline solution, subcutaneously and by the drop method in the bowel.

The following cases are reported briefly, because I think the condition in each was sufficiently alarming to have led the average operator to drain. I will admit that during the years 1907 and 1908, I drained cases not reported here, which I would close now without drainage. The cases reported as being operated upon in 1909 and 1910 were much graver in appearance than those of the previous years and I have omitted those cases which, during the past and present years, have shown only evidences of peritoneal infection extending a short distance beyond the original focus.

1907.

1. L. M., aged 29, suppurative appendicitis. No appearance of adhesions. Appendix removed, abdomen sponged, and closed without drain. Temperature rose to 102 and pulse to 112; no other bad symptoms. Patient left the hospital twenty days after operation in good condition.

2. J. M., aged 54, acute suppurative appendicitis. Infection appeared general, but the amount of pus present was small. Appendectomy. No drain. Patient left hospital in thirteen days, cured.

3. Miss M. K., aged 17. Suppurative appendicitis. Appendectomy. Left hospital in eighteen days, cured.

4. H. G., aged 37. Abscess between coils of small intestine, possibly

sterile as the complaint was an old one. Abscess cavity freely exposed, and wiped out with gauze. No attempt made to prevent communication between abscess cavity and abdominal cavity. No drain. Patient left hospital in twenty days.

5. L. B., aged 2 years. Suppurative appendicitis. Appendectomy. Remained in hospital twenty-three days, because of infection of the abdominal wound. Recovered.

6. Mrs. L. P., aged 20. Gangrenous appendicitis; pus in the peritoneal cavity, with no signs of adhesions. Appendectomy. No drain. Eighteen days in hospital; recovered.

7. Mrs. W. U., 39. Suppurative appendicitis; appendectomy; no drain; small stitch abscess; twenty days in hospital; cured.

1908.

8. Miss F. B., 14. Suppurative appendicitis; adhesions absent; appendectomy; no drain; thirteen days in hospital; cured.

9. F. R., 37. Perforative appendicitis; no efficient adhesions; appendectomy. No drain in peritoneal cavity, though on account of apparent virulence of the infective process, one was placed in the abdominal wound. Thirteen days in hospital; cured.

10. E. R., 16. Tubercular appendicitis; peritoneum badly soiled with pus during operation. Closed without drainage. Twenty-one days in hospital. Six months later, died with general tuberculosis.

11. C. D., 6. Suppurative appendicitis; pus free in abdominal cavity. Appendectomy. No drain; in hospital fourteen days; cured.

12. E. H., 24. Purulent appendicitis. Appendectomy. No drain. In hospital fourteen days; cured.

13. Miss E. C., 19. Purulent appendicitis. Appendectomy. No drain. in hospital seventeen days; very slight wound infection. Cured.

14. J. J., 7. Suppurating fistula, following an operation for drainage of an appendiceal abscess; done seven months previous to the present operation. Appendix, as well as a mass of infected tissue surrounding the focus of infection removed. No drain. Patient left the hospital in seventeen days, cured.

15. Mrs. J. F., 31. Perforative appendicitis, with apparent general peritoneal infection. Appendectomy. No drain. Thirteen days in the hospital, cured.

16. Miss M. G., 23. Suppurative appendicitis; fairly well walled off with pus, confined to an abscess cavity. The abscess was invaded, with some considerable soiling of the abdominal contents. No drainage. Patient left the hospital in nineteen days, cured.

1910.

17. R. D., aged 7 years. Suppurative appendicitis, infected area extending well over the right side of the abdominal contents. Appendectomy. No drain. Left hospital on the thirteenth day, cured.

18. F. N., 23. Perforative appendicitis, with general peritonitis. Abdomen greatly distended, and upon incision, gas bubbles escaped from the

pus which flowed from the wound. Large abdominal sponges used for packing during the operation, were removed saturated with pus. Abdomen cleansed with dry sponges and closed without drainage. Pain was severe, and required a few doses of morphine; temperature went up to 103, and pulse to 132. On the third night after operation, patient had, what the nurse reported as fecal vomiting, but this turned out to be simply an accumulation of bilious matter in the stomach. Gastric lavage relieved the patient entirely, and I am satisfied that much of his pain was due to the foul condition of the stomach. A small stitch abscess developed, which kept the patient in the hospital for sixteen days, when he was discharged, cured.

19. A. P., 19. Perforative appendicitis, with general infection of the peritoneal cavity. Pus present in quantity sufficient to require prolonged and repeated spongings. Intestines purple and showing several patches of membranous deposit. Appendix removed, and abdomen closed without drain. Patient returned home on the fourteenth day, cured.

I could report many additional cases, in which the infection has been quite limited, but they have had little interest for me, especially during the past year, when I have undertaken to close abdomens in which the infection was apparently much greater. I am quite aware of the fact that the nature of the infection largely determines the result, but I cannot believe that all of these cases have been comparatively innocent.

During the year 1911 I have inserted two intra-peritoneal drains. Both of these cases died, not, I think, because of the drain, but rather because of the desperate nature of the cases themselves. Dr. W. H. Bartran, who is associated with me in the work at St. Mary's Hospital, follows about the same course as I have here outlined.

---

# THE SURGICAL IMPORTANCE OF CERTAIN VESTIGEAL STRUCTURES WITH REPORT OF CASE OF PERSISTENT DUCTUS THYREOGLOSSUS.*

BY CHESTER M. ECHOLS, M. D.,

MILWAUKEE, WIS.

Robert Morris, in a philosophic and historic resumé of the progress of surgery from early times, designates the present epoch in surgery as the physiologic era. According to this conception the patient is to be looked upon as a factory, whose chief business while

*Read before the Medical Society of Milwaukee County, Feb. 9, 1912.

sick is to manufacture opsonins to cripple bacteria and phagocytes to devour them. In this, as in most epigrammatic sayings in surgery, some truth is sacrificed, or at least omitted, for the sake of vividness of expression. Should I offer any amendment to his classification, it would be to the effect that this is an *embryologic* as well as a physiologic era. For although physiology has much to teach the operator in the surgery of ductless glands and digestive tract, treatment of shock, management of peritoneal infections, and the like, it must not be forgotten that in recent years much light has been thrown upon many obscure surgical problems by embryologic considerations. I need only mention the symptom complex arising from certain diseases of the stomach, duodenum, pancreas, and biliary tract as being explained on the ground that these structures all originated from the primitive fore-gut; or that spasm of the pylorie sphincter may be caused by irritation in some other (distal) part of the digestive tract having a common origin with the pylorus; or that pain referred to regions not supplied by the same spinal segments as the site of irritation, as for example, pain in the right shoulder from gall stones, is possible only because of the sympathetic system, which is of mesoblastic origin and therefore non-segmented in character.

It is probably no exaggeration to say that to many physicians embryology is a closed and sealed book,—closed since their sophomore year,—and not very widely opened then. To them the subject is of academic interest only. This is a real misfortune, and is no doubt due as much to the lack of proper facilities for teaching embryology as it is to the natural difficulties inherent in the study itself.

To pursue this thought further would lead us too far astray from my subject, which is the surgical importance of certain of the embryonic remnants, or vestigeal structures.

In post-natal life the human organism contains numerous embryonic landmarks which were a puzzle to the older anatomists. Some of these are of no surgical significance whatsoever, for example, the ductus arteriosus, or the fossa ovale of the heart. Others give rise to cysts or fistulae which may become a source of great annoyance if not actual danger.

In discussing those of surgical importance I shall limit my remarks to certain epithelial-lined remnants, mostly hypoblastic in origin, found in the neck, abdomen, and the female pelvis.

*Neck*: Cervical cysts and fistulae of congenital origin are of two kinds, lateral and median. The lateral are derived from the

branchial clefts, while the median are practically all derived from the unobliterated ductus thyreoglossus. By keeping in mind this classification we are less likely to go astray on diagnosis.

1. *Lateral cervical cysts* and fistulae of congenital origin nearly always arise from epithelial rests left by incomplete obliteration of the second branchial cleft, although Fritz Koenig is authority for the statement that the first and third clefts may also form cysts. The cysts are so slow in development that for a long time they may escape notice, and are generally first observed in youth or early adult life. Examination reveals a rounded, fluctuating, non-inflammatory tumor on the side of the neck near the angle of the jaw, covered by the non-adherent skin and platysma. Internally these cysts can all be traced to the region of the tonsil. Just a word about the character of the cyst lining and contents. The internal end of the branchial fissures is lined with entoderm and the outer with ectoderm or epiblast. Consequently branchogenic cysts may and often do have an epithelial lining of a mixed character. The greater portion of the cyst wall being derived from the primitive pharynx, consists of ciliated epithelium intermingled with lymphoid tissue, such as is found in abundance in the pharyngeal mucosa. This accounts for the mucous character of the contents of most of these cysts. On the other hand the outer or sub-cutaneous portion of the cyst lining being of epidermal origin, is covered with stratified-epithelium and often contains skin structures, such as papillae and sebaceous glands. Now the character and consistency of the contents depend upon which of these two separate parts of the lining predominates. If the entodermic mucous membrane forms the greater part of the lining, the contents will be mucus, and the cyst fluctuating. If the epidermal structures enter largely into the cyst wall, we are apt to find the contents like that of an ordinary dermoid, and the tumor of doughy consistency.

Meddlesome aspiration or incision, sometimes done by physicians who fail to recognize the congenital character of the cyst, and who think that drainage or injection of a little tincture of iodine or other irritant will effect a cure, converts these cysts into permanent fistulae, and thereby increases the difficulty of radical cure. Of course, the cysts may break spontaneously through the skin, thus producing the same kind of permanent fistula that results from incision.

One important fact to be remembered in the surgical cure of branchial cysts or fistulae is that they are lined throughout with epithelium, and epithelium is very tenacious of life. Therefore it is

impracticable and unsafe to inject irritants or caustics strong enough to destroy all the lining and produce complete obliteration. Likewise in the surgical removal of such cysts it must be remembered that the smallest patch of epithelial lining left behind is sure to lead to recurrence. The unbroken cyst is always easier to enucleate *in toto* than a fistula, and besides, the fistula is always infected, which interferes with primary healing and increases scar formation. Removal of fistula may often be facilitated by preliminary injection with paste or packing with gauze.

2. *Median cervical cysts* and fistulae of congenital origin practically always originate from the incompletely obliterated ductus thyreoglossus, a fetal structure extending from the foramen cecum on the dorsum of the tongue, forward and downward to the middle lobe of the thyroid gland. This canal is normally obliterated before the fourth month of fetal life, but occasionally a small part of the duct wall remains to cause future trouble. The mucous secretion from the duct remnants, seeking the exit of least resistance, makes its appearance under the skin in the median line of the neck at the level of the body of the hyoid bone and gravitates downward, pointing as a fluctuating cyst somewhere between the thyroid cartilage and the jugulum. If the cyst has already been converted into a fistula, either by spontaneous rupture or by deliberate incision, then it will be found that a slender probe can be passed directly upward immediately under the skin to the level of the hyoid bone, but no farther. At this point the tract makes an abrupt turn backward. It may happen, too, that the posterior half of the duct, that is, the portion lying between the body of the hyoid and the foramen cecum, is not patulous. It should be mentioned here that the ductus thyreoglossus makes its appearance prior to the development of the cartilage which forms the body of the hyoid bone. The subsequent development of the hyoid may divide the duct into two parts, or there may even be a hole or notch in the body of the hyoid through which the duct passes.

One point of great diagnostic significance in these median fistulae is that a cord-like ridge may be felt under the skin leading from the external opening up to the hyoid bone.

Before undertaking the radical removal of such a fistula it is desirable to know whether the tract is patulous back as far as foramen cecum. If we inject common salt solution with considerable force into the skin opening, the patient should taste it if the fistula is complete, that is, if the posterior segment is patulous.

The successful removal of these median fistulae is rather difficult, more so than those of branchiogenic origin. The technical difficulties are increased if the posterior portion of the duct is patulous, in which case it may be necessary to make a temporary division of the body of the hyoid bone to gain access to that part of the duct lying within the base of the tongue.

*Illustrative case.* This young man [exhibiting patient], thirteen years of age, was operated upon a few months ago for the radical cure of a congenital cyst originating from the remnants of the ductus thyreoglossus. You will observe the median linear scar extending from a point one inch above the jugulum up to the level of the body of the hyoid. Nearly a year before I saw this patient there appeared a small fluctuating cyst in the median line of the neck "about where the collar button ought to be." The cyst was not painful, but was a source of some worry to the patient and his mother. Another physician kept the patient under observation and treatment for a few weeks and then incised the cyst and evacuated the mucous contents, presumably without appreciating its embryonic origin. The cyst thus became a discharging fistula which refused to heal. The patient consulted several physicians and various diagnosis were made, some of them correct. When I examined him there was a muco-purulent discharge from the fistula above the jugulum. There was a distinct indurated ridge leading from the external opening directly upward under the skin to the level of the hyoid bone. Fortunately, the part of the ductus thyreoglossus lying within the base of the tongue in this case had been obliterated, as I could prove by preliminary tests, and positively demonstrate at the time of operation. This fact made the operation much easier than it is in those cases in which the body of the hyoid must be resected.

You will notice that there is a fairly conspicuous scar along the median line of the neck where I dissected out the fistula. There are two reasons for this. In the first place there is only a very small amount of subcutaneous fat under the skin in front of the larynx, which fact tends to diminish the mobility of the scar. Secondly, these fistulae are always infected, and it is therefore impossible to have the wound heal *per primam.*

As there has been no tendency to recurrence after a lapse of eight months since operation, the epithelial lining has doubtless all been eradicated.

*Abdomen*: Of the numerous abdominal landmarks of early embryonic life I shall refer briefly to only two which are of more than ordinary clinical importance, namely, the vitelline duct and the patulous or cystic urachus. I am not including the vermiform appendix among the vestigeal fetal structures, for while it may be vestigeal for the race, it is not for the individual.

1. The omphalo-mesenteric or vitelline duct connects the gut tract with the yolk sac at the umbilical opening up to the end of the eighth week of embryonic life and then becomes completely obliterated

in ninety-eight or ninety-nine per cent of cases. Its failure to vanish may result in any one of the following conditions:

(a) Entirely patulous, leaving a congenital fecal fistula between the ileum and the umbilicus.

(b) Closure of the intestinal end only, leaving a mucous fistula discharging at the umbilicus.

(c) Obliteration of umbilical end only. This leaves a blind pouch standing out at right angles from the last third of the ileum which may or may not be connected with the umbilicus by a fibrous cord. This is the commonest form of this malformation and constitutes the familiar Meckel's diverticulum.

(d) Closure of both umbilical and intestinal ends of the duct, leaving an open intermediate portion which may develop into a good sized cyst lying behind the abdominal wall in the neighborhood of the umbilicus. This is the so-called entero-cystoma, and contains unstriped muscle fibers in its thin walls.

The most serious surgical emergency arising from any of these malformations is an ileus caused by the fibrous band which occasionally binds Meckel's diverticulum to the umbilical scar. Fortunately this is rare, but should always be thought of and looked for in ileus from obscure causes.

2. *The allantois* ceases to have any function after the placenta is formed and attached in the third month, and after undergoing atrophy it is represented in the adult by the solid cord connecting the bladder apex with the umbilical scar. Occasionally it remains patulous as a congenital urinary fistula, especially in those cases in which there is some obstruction to the normal exit of the urine. In other cases the bladder end of the tube becomes closed and cystic formation occurs nearer the umbilical end. When these cysts become infected and discharge pus or mucus at the umbilicus they are not easy to differentiate from vitelline duct fistulae.

*Female Pelvis*: Sex differentiation in the first three months of embryonic life leaves the female pelvis especially rich in vestigeal structures, many of which are sources of trouble in adult life. Of course, the male genito-urinary organs also bear some embryonal landmarks, such as the uterus masculinus and the paradidymis, but these are of negligible importance from a surgical standpoint.

First there should be mentioned the hydatid of Morgagni, which is usually seen as a transparent cyst, the size of a small cherry dangling on a slender pedicle from the fimbriated end of the fallopian tube.

It seldom attains pathologic size or importance, but it is an interesting relic of development, representing as it does the blind upper end of Mueller's duct from which the tube was formed. The fimbriated end of the tube does not represent the upper end of Mueller's duct, but is developed from a slit which appears on the side of the duct some distance from its upper end.

The Wolffian duct, thought important to the male, gives rise to no functionating structures in the adult female, and its remnants, lying between the layers of the broad ligament and in the lateral vaginal wall, are a fruitful source of trouble. The horizontal cord running parallel to and below the fallopian tube within the broad ligament may be said to represent the vas deferens of the male, while the small vertical tubules extending from this cord downward to the ovary represent a portion of the epididymis. These structures, collectively known as the parovarium, and originally lined with epithelium, give rise to the familiar and very troublesome parovarian intra-ligamentary cysts. The symptoms of such a cyst are often out of proportion to its size. This is due to its lack of mobility and its relatively fixed position between the layers of the broad ligament. This cyst [exhibiting specimen] the size of a small cocoanut is one of the intra-ligamentary type of parovarian origin, which I recently succeeded in enucleating without rupture. There was no difficulty in making the diagnosis before operation, because the cyst was laterally placed, very low in the pelvis, slow in development, not especially tender to pressure, thin walled instead of having the board-like hardness of an abscess, had displaced the uterus to the opposite side, and had caused only local symptoms such as vesical irritability.

Sometimes we discover cysts the size of a pigeon's egg in the upper part of the vaginal wall, usually on its lateral or antero-lateral aspect. The question naturally arises, what is the origin of such cysts? The vaginal wall ordinarily contains no glands, or practically none. Therefore these vaginal cysts are not the ordinary retention variety, due to glandular obstruction. Investigation shows that they usually arise from Gaertner's duct which is the name given to the remnants of the lower part of the Wolffian duct, representing part of the vas-deferens, seminal vesicles, and ejaculatory duct of the male. This duct of Gaertner when present, runs diagonally across the lateral vaginal wall from above downward and forward, and should always be thought of as the source of cysts found in this location.

In this brief paper I have not attempted to include all of the

fetal remnants of surgical interest, but enough, I hope, have been mentioned to emphasize the importance to the surgeon and physician of a knowledge of embryology.

---

## GASTROPTOSIS FROM A RADIOGRAPHIC STANDPOINT.

BY WILLIAM F. HILGER, M. D.,

MILWAUKEE.

Explorations of the gastrointestinal tract were made soon after the discovery of the X-ray, but not until very recently has it become an efficient diagnostic agent in connection with diseases of the digestive tract.

Although radiographing the stomach is a comparatively simple procedure for the present day radiographer, yet the correct interpretation of the skiagraph in such a manner as to obtain from it all the essential data that it is able to furnish, to render accurate deductions from such information, and put them to practical use, is by no means easy, but requires experience, study, and good judgment.

The accuracy of the radiograph method of diagnosis depends upon:

*First*—The preparation of the patient.

*Second*—The technique of examination and

*Third*—Correct interpretation of the skiagraph.

The examiner should be previously consulted and any directions he may give should be followed. There are no fixed rules for preliminary preparations of cases of this kind. It is important that the examiner should have some clinical data of the case as well as an idea of the information he is expected to furnish.

The technique depends upon the methods of the operator. Any substance which is easy to swallow, is inert, and arrests the X-ray sufficiently will do. Good results have been obtained by using bismuth subcarbonate, acacia and milk, or the bismuth salt with chicken soup.

As important as the radiographer's personal requirements is the access to suitable apparatus.

In accurate interpretation of the skiagraph, it is essential in the first place, to thoroughly understand the normal anatomical relations of the stomach, its normal skiagraphic appearance and the range of variation of both within normal limits.

The essential points for the radiographer to remember, in order to interpret skiagraphs correctly are as follows:

*First—The Cardiac End.* This part of the stomach is securely attached and may be regarded as a fixed point, at the left side of the mid-line on the level of the tenth or twelfth dorsal vertabra.

*Second—The Pylorus.* This part of the stomach varies somewhat in normal cases. Anatomically it is described as on the level with the first lumbar vertrebra, or slightly lower and to the right of the mid-line. Under the influence of distension, it may lie as far as two inches to the right of the mid-line.

*Third—The Greater Curvature.* This is the most dependent portion of the stomach. It varies under normal conditions in different individuals, and in the same individual with different degrees of distension; but the lowest border should lie above the level of the normally situated navel, or that of the third lumbar vertebra.

*Fourth—The Lesser Curvature.* Normally it runs obliquely downward and forward in almost a straight line from the cardiac end nearly to the pylorus, where its direction becomes upward and to the right.

*Fifth—Shape.* When the stomach is filled the fundus rises above the level of the cardiac opening and on account of this high position gas is apt to collect there and show in the skiagraph as the magenblase.

Under such circumstances, this is normally the widest portion of the stomach, which becomes more tubular as it approaches the pyloric end.

In gastroptosis the stomach is usually found to assume a more vertical position than normally. The greater curvature is below the level of the third lumbar vertrebra. Neither of these changes alone nor together should in all instances be regarded as absolute evidence of gastroptosis.

An empty stomach normally assumes a nearly vertical position for the reason that the pylorus is not firmly attached and may drop to a relatively low level. A mistaken diagnosis of gastroptosis would be avoided by careful attention to the details of the technique of the examination.

Under abnormal distension, moderate dilatation or an enlarged liver, the greater curvature may drop below the level of the third lumbar vertebra without gastroptosis. A growth of the liver or pancreas could force the stomach into a vertical position and the greater curvature below the normal level and yet strictly speaking, this would not be an instance of gastroptosis.

In examining for gastroptosis, it is important to determine the greatest degree of ptosis that is likely to exist under ordinary conditions, and for this reason we should radiograph in the erect position.

One reason why clinical examination often fails to reveal slight degrees of ptosis that are shown by the skiagraph, or the extent that the latter indicates, is the fact that the former is made in the recumbent position and with the stomach distended with air or gas, which is not a normal condition.

Liquids and solids inside the patient's stomach follow the same law of physics as they do outside, namely to get as close to the center of the earth as possible and displace substance lighter than themselves provided friction is not too great. It would be absurd to expect a gas distended stomach to sink in water, it would also be ridiculous to expect the greater curvature of the stomach to be at its lowest possible level with an air-filled viscus.

A patient's air-distended stomach does not float on water, it is true; but it is much lighter than the intestines filled with liquid and solid food, which change position readily. Since the abdominal wall in these cases is generally relaxed, the stomach distends along the line of least resistance, outward.

Radiographs taken of the same subjects, with the same amount of liquid stomach contents, showed the greater curvature from one to two inches higher in the recumbent position than in the erect.

Most radiologists who have examined many cases of gastroptosis have at some time of their experience come to the conclusion, that an individual with a normal stomach is the exception rather than the rule. This impression may be justified if we consider that patients sent to us for such examination, are those in which there is good reason to suspect gastroptosis. Undoubtedly gastroptosis is present in a great number of cases, even if there are no subjective manifestations, or clinical evidences of its existence In such cases it is not strictly pathological, and may not be possible to discover it by clinical methods.

This type may be a premonitory stage of a true pathologieal ptosis. The result of some anatomical abnormality, such as lack of support from a relaxed gastro-hepatic ligament, a widely movable or unusually low pylorus.

The stomach may be dragged down by a ptosed or distended transverse colon or pushed downward by a ptosed or enlarged liver, The etiology, from a radiographie standpoint does not concern itself with the remote or direct external causes, but with such factors as are directly concerned in the mechanism of ptosis. Relaxation of the

gastro-hepatic ligament will cause gastroptosis as it will allow the stomach to assume a vertical position, and since the more vertical the stomach stands the sharper will the duodenal curve become, it may thus actually cause kinking of the pylorus.

This pyloric obstruction caused by kinking will finally result in dilation, retention and relaxation. The question to decide from the skiagraph, will be: Is the gastroptosis due to dragging of the transverse colon upon it, to tumor of the liver or pancreas, relaxation of the gastro-hepatic ligament, or due to a general visceroptosis.

## TREATMENT.

Some useful suggestions may be obtained from the radiographic appearance as to the proper method of treatment. In uncomplicated cases of gastroptosis, an operation shortening the gastro-hepatic ligament will be followed by a complete cure.

In case of gastroptosis associated with general visceroptosis attention must be paid to all the abnormally placed organs, by operative or mechanical means, otherwise no amount of medicine or lavage will do any good as far as a cure is concerned.

Gastroptosis with retention and dilatation are greatly benefited by gastric lavage and gymnastics.

*Case I.* Mrs. F., white, age thirty-five years, German-American. Family and previous history proved negative. In February, 1907, patient noticed loss of appetite, fullness after meals, constipation, a dragging pain in the back of abdomen, loss of weight and strength. Patient submitted to medical treatment without relief.

August 3, 1911, patient came for an examination. There appeared considerable emaciation, very weak, not able to perform the lightest work, Temperature 99, pulse 80, no appetite, dragging feeling in back and abdomen, fullness and constipation, physical examination was otherwise negative.

After a test meal, the gastric contents showed the free HCl. .17%, total acidity 30, no lactic acid present.

The skiagraph showed the pylorus at the third lumbar vertebra. The greater curvature at the fifth lumbar level, retention of the meal six hours after ingestion, no kinking of the pylorus, no evidence of tumor or obstruction.

Diagnosis of gastroptosis with retention was made from the skiagraphic picture. Daily gastric lavage for three months was carried out, with disappearance of the symptoms. At this time another radiograph was taken, same technique and position, showing the pylorus in the same position but the greater curvature on a level with the third lumbar vertebra therefore a shortening of two and one-half inches.

# AN IMPROVED MOUTH-GAG FOR TONSILLECTOMY.

BY HENRY B. HITZ, M. D.,

MILWAUKEE.

In the operation of tonsillectomy as now done, two general methods of anesthesia are employed. The first method employs some one of the local anesthetics, injected around the site of the operative field, and the dissection of the tonsil is carried out with the patient

Hitz's modification of Sewell's Mouth Gag and Tongue Depressor, with Hitz's Ether Conduit attachment or equipment and separate Mouth Gag Blade.

in a conscious state. The second employs one of the general anesthetics, and is the method particularly adaptable for tonsillar operations upon nervous individuals and for all children. The gag herein illustrated is a Sewell gag, modified by the introduction of a tube in

the tongue depressor through which the vapor of *ether* is delivered about one-half inch anterior to the end of the blade upon its upper surface by means of a tube connection with an ether vaporizer worked by a foot bellows.

The technic is as follows: the patient is first anesthetized by the drop method until the end of the second stage, and then the mouth is opened and the gag inserted, the tongue depressor having been adjusted to the proper length. A sand roll is placed under the left shoulder and against the back of the head, and the light, pre-

Hitz's Ether Container and Vaporizer.

ferably direct daylight, admitted from the right side. The tongue depressor gives a clear view of the site of the operation, while the patient can be kept thoroughly anesthetized, without the inconvenience of an extra tube in the mouth or nose. The gag is steadied under the chin by the hand of the anesthetist. This type of apparatus has

been in use at the Children's Free Hospital, Milwaukee, for the past two years, and has been found to be the most satisfactory instrument yet devised for this work. It not only allows of a clear view for the rolling of the tonsil out of its bed, but also affords excellent facility for inspection of the cavity and the easy control of hemorrhage in a surgical manner, i. e. by the use of hemostats, and ligature if necessary.

---

## CLINICAL DEPARTMENT.

---

### SACRO-ILIAC STRAIN; CASE REPORTS.

BY EDWARD EVANS, M. D.,

LA CROSSE.

Case 1. Mrs. L., age 38, mother of several children, youngest fourteen; never sick until present trouble began.

*History of Present Trouble.* In October, 1910, while housecleaning, got a pain about the left buttock which extended down the thigh and calf of the leg to the ankle, causing her to limp and have continuous pain, which in the autumn of 1911 was so severe as to put her to bed for five weeks. In November, 1911, she spent three weeks in a hospital, where tuberculosis of the spine was diagnosed, and she was put in a plaster of Paris cast. This caused her great pain and was left on for only one week. Condition from that time up to the present remained unchanged.

*Present Condition.* She complains of almost continuous pain, which extends from the small of the back down the left buttock and thigh and as far as the ankle, in which latter place the pain is often especially severe. She is unable to bear much weight on this leg; she cannot lie on the left side; rolling over in bed causes pain in the small of the back and in the left sacro-iliac region.

*Examination.* All the movements of the left hip are normal. There is no muscular wasting; there is tenderness to pressure over the left sacro-iliac joint; the lumbar curve is obliterated, and movements of the spine are somewhat limited; the Goldthwait sign is well marked on the left side; the pelvic organs are normal.

*Diagnosis.* Left sacro-iliac strain, with probable slight displacement.

*Treatment.* Under ether the pelvis was manipulated; the patient

placed in extreme lumbar lordosis and a plaster of Paris cast applied, extending from the short ribs well down on the left thigh, and put on with extreme snugness. When patient awoke from the ether she declared that her pain had all disappeared and up to the time she left the hospital, there had not been the slightest return of it.

After wearing the cast for a month or so, she will return, to have a well-fitting corset and a pelvic band applied.

Case 2. Miss M. B. had severe typhoid in the latter half of 1910. Was in bed twenty weeks. On getting up she complained of backache and since that time has never been free from it. Has been unable to work and has suffered especially at her menstrual periods, when she always had to go to bed. When I saw her in January, 1912, she was tall, thin, anemic, discouraged and unable to do anything in the line of work for more than an hour or two at a time, when she would become exhausted and have to lie down because of her backache. She stood poorly, resting on her heels mainly; did not walk well, and had obliteration of the lumbar curvature and tenderness of the right sacro-iliac joint. Examination under ether failed to show anything wrong with the pelvic organs. She was put on light gymnastics and the sacrum strapped with adhesive plaster, and later pelvic belt fitted under a long corset, but without relief.

In March, 1912, under ether, the pelvis was manipulated; the patient put in extreme lumbar lordosis, as in the previous case and a tight-fitting plaster of Paris bandage applied, as in case one, and the patient sent home.

She returned to the office March 29th, saying that she had had no pain in the back since the application of the bandage; that she had menstruated in the meantime, and did not suffer in the least for the first time in more than eighteen months.

The bandage was removed, and a long, well-fitted corset applied, which maintained the dorsal curvature.

## Comments.

These two cases illustrate very strikingly a class of cases that too frequently are not diagnosed properly. I am convinced that many of the backaches we find persisting after a lingering illness and after severe surgical operations are due to sprained and weakened sacro-iliac joints.

I am sure that by careful supervision of those patients during convalescence, we can prevent a great deal of suffering and a great

deal of invalidism. It is all a question of first knowing that this trouble is a very common one, and then making a careful differential diagnosis, for the diagnosis once made it should be possible to give relief to those cases. They are so constantly turning up in my practice that I am convinced that we all overlook their existence and very often fail to properly relieve them.

---

**Case Histories in Neurology.** By E. W. Taylor, A. M., M. D. Instructor in Neurology, Harvard Medical School. Pub. W. M. Leonard, Boston.

The most important diseases of the nervous system, functional and organic, are here set forth by actual case records. Over one hundred clinical cases are thus presented in such a way, as to furnish a theme for the description of the most important and common nervous disorders.

What is thus lost in the fuller academic presentation of the subject in the usual didactic form of the text-book is more than gained by the greater interest in the concrete case set forth clinically, the brevity insured which often permits of the exhibit of several similar cases seen at different angles, and in the greater attractiveness that clinical teaching has over the didactic form, especially for the casual student reluctant to engage in the more erudite fields of neurology.

Under the different headings, spinal, peripheral, brain diseases, diseases without known anatomical basis, and the neuroses, a particular clinical case is set forth in full symptomatology followed by the diagnosis, prognosis, treatment, and post mortem findings. The work has about 300 pages and is well illustrated and deserves great appreciation for the practical and attractive form it embodies in the teaching of neurology.

It is the latest of the so-called Case History Series, a method of teaching, made popular by many teachers in Boston and elsewhere and follows similar works on medicine, pediatrics, and surgical problems.

---

**Case Histories in Medicine.** By Richard C. Cabot, M. D., 2nd edition. Price, $3.00. W. M. Leonard, publisher, Boston.

This method of teaching medicine, while necessarily lacking in systematic arrangement, approaches as nearly as is possible in a descriptive method, to actual bedside instruction.

In the preliminary sketches of the patients' histories, just enough data are given to "make the student think" and the method may well be compared to the method now in vogue in instructing army officers in time of peace in the so-called "Krieg-Spiel," whereby without actual warfare military tacticians are developed, so without actual patients, medical practitioners may be so trained as to be able to approach real patients in the proper analytical manner.

The book, aside from its value as a means of instruction, is an entertaining and readable work for any physician interested in the problems of internal diagnosis. In the hands of any man other than the author, the

method might still be of value, but surely Cabot's touch of genius is sufficient to insure the success of this volume.

Appended to the work is a list of the medicaments and therapeutic measures found of value by the writer in his hospital and private work with some valuable comments on the use of certain of the best known drugs.

---

**Medical Diagnosis.** For the use of Practitioners and Students. By J. C. Wilson, A. M., M. D., Professor of the Practice of Medicine and Clinical Medicine in the Jefferson Medical College, Philadelphia. Third edition, thoroughly revised. Octavo, 1414 pages, with 418 text illustrations and 14 full page plates. Cloth, $6.00 net. J. B. Lippincott Co., Philadelphia and London.

In the preface to the first edition the author says: "The treatment of the subject under four main headings has been adopted with the view of simplifying the arrangement of the topics in a department of medicine which has attained large scope and insistent importance. It is the confident expectation of the author that this plan will fulfill the two-fold requirement; that, within the compass of a single book clinical phenomena, on the one hand, and, on the other, those complexes of clinical phenomena which constitute diseases, are brought into correlation in such a manner that the practitioner who seeks information upon an obscure case may at once turn to the discussion of the methods available to clear it up, and the student may find the definite clinical applications of the same methods and their results in descriptive medicine.

"Practical rather than theoretical considerations have been held constantly in view alike in the treatment of the clinical and the laboratory subjects. To attain this end a degree of positiveness of assertion not warranted under other circumstances and the avoidance of the discussion of moot and unsettled questions have seemed proper."

This practical point of view is in evidence throughout the whole extent of the work and the result to the reader is a directness of statement and a simplification of methods of procedure which is very welcome.

The call for a third edition of this work within two years of the time of its original publication is strong evidence of the popularity of Dr. Wilson's volume.

In the preparation of the present edition the "articles upon typhus fever and relapsing fever have been re-written and brief studies of tabardillo or Mexican typhus and Brill's disease, which I have ventured to designate pseudo-typhus, have been introduced. The articles upon epidemic anterior poliomyelitis, beri-beri and pellagra have also been rewritten. Serum disease and anaphylaxis in general have been considered, much of the sections on diseases of the stomach and diseases of the heart has been recast, and a section on the electrocardiograph added. Many changes in diseases of the nervous system have been made."

The book is conservative in its tone throughout and the author has not allowed well-tried methods to be concealed by a mass of new "up-to-the-minute" processes and refinements, the real value of which is still problematical.

# WISCONSIN MEDICAL JOURNAL

OFFICIAL PUBLICATION OF THE STATE MEDICAL SOCIETY OF WISCONSIN.

A. W. MYERS, M. D., Editor.
141 Wisconsin Street, Milwaukee.

J. P. McMAHON, M. D., Managing Editor.
141 Wiscoosin Street.



Publication Committee:

A. J. Patek, M. D., Milwaukee.
O. H. Foerster, M. D., Milwaukee.
G. E. Seamao, M. D., Milwaukee
C. S. Sheldoo, M. D., Madisoo.
S. S. Hall, M. D., Ripon.

Collaborators:

The Couocil.

M. R. Wilkinsoo..... .....Oconomowoc
G. Windesheim..... .....Kenosha
F. T. Nye..... Beloit
W. Cuooingham.....Platteville
J. V. Mears..... Food du Lac
H. W. Abraham.....Appleton
Edward Evaos.....La Crosse
T. J. Redelings .....Marioette
O. T. Hougeo.....Grand Rapids
R. U. Cairos.....River Falls
J. M. Dodd..... ..... Ashlaod
H. E. Dearholt..... .....Milwaukee



Annual Subscription. - - - $2.00. Single Copies, - - - - - $0.20

Address all business commuoicatioos to
WISCONSIN MEDICAL JOURNAL,
504 Goldsmith Buildiog, Milwaukee.

[Entered as second class matter, June 30th, 1903, at the Post Office at Milwaukee, Wis., under Act of Congress, March 3rd, 1879.]

Vol. X. APRIL, 1912. No. 11


## EDITORIAL COMMENT.

### THE STATE MEDICAL SOCIETY MEETING.

Only a few weeks remain before the Wausau meeting. The official dates are May 22d to 24th, but when you read the plans of the Committee on Arrangements which will be given in detail in the May Journal (which, by the way, will appear *before* the meeting) it is hoped that you will decide the proper dates to be May 21st to 25th.

This is to be the Sixty-sixth Annual Meeting. Two-thirds of a century have elapsed since the establishment of the State Medical Society. Let us make it a meeting memorable for its attendance, its good-fellowship, its loyalty, its inspiration.

## THE PROGRAM FOR THE WAUSAU MEETING.

On page 663 of this issue of the Journal will be found the program for the 66th Annual Meeting of the State Medical Society of Wisconsin, to be held at Wausau on May 22, 23 and 24. It covers a wide range of subjects and appeals to every taste.

We are to be unusually fortunate this year in having with us at the meeting three visitors of distinction from outside of the state. In all probability the first afternoon's session will end with the paper by Dr. F. M. Pottenger of Monrovia, California, on "Some Important Points in the Diagnosis of Tuberculosis," a subject on which we need all the light obtainable. Dr. Pottenger's name is so well known in connection with tuberculosis that he needs no introduction.

The morning of Thursday, May 23, will be devoted to medical subjects leading up to the Annual Address in Medicine on "The Growing Importance of Preventive Medicine," by Dr. Joseph H. White of the U. S. Public Health and Marine Hospital Service. Dr. White is one of the ablest and best known men in this important department of governmental activity, and in 1909 served as chairman of the Section on Preventive Medicine and Public Health of the American Medical Association. His writings on the various phases of preventive medicine, especially on the subjects of plague and yellow fever, have commanded wide attention.

No one can read the list of titles on this year's program without realizing the large part preventive medicine occupies in the mind of every wide-awake physician today. More than one-third of the papers may be said to bear directly on the preventive aspect of medicine. And this is no unreasonable proportion, for the future will surely reveal wider and wider opportunities for beneficent work in this direction.

The afternoon session on Thursday will be occupied with a consideration of surgical topics, ending with the Annual Address in Surgery, by Dr. W. D. Haggard of Nashville, Tenn. Dr. Haggard is well known as one of the best surgeons in the South today, and it will be a great privilege to have him with us. The title of Dr. Haggard's paper has not been announced, but his writings have covered a wide variety of surgical subjects. He has devoted especial attention to the subject the thyroid and its surgery, and it may be that he will discuss some phases of this subject, which is one of particular interest in Wisconsin on account of the prevalence here of thyroid disorders.

The concluding portion of the program deals with subjects which are of practical importance to every physician, so it will be well worth while to wait for it.

Let us try to make this meeting a memorable one by reason of the freedom of discussion of the various papers. The discussion of the subjects is at least half the value of the meeting. So let us all try to contribute our share towards making the meeting a success by getting our ideas into definite, compact form before hand and when the time comes let us present our views with courage, but always with good feeling, so as to put more life into the meetings.

## THE SECRETARIES' MEETING.

One of the best things that has happened to the State Medical Society in recent years was the introduction of the meeting of the secretaries of the component societies and the officers of the State Society on the evening preceding the opening of the regular Annual Meeting of the State Medical Society.

Look in the Booster Section of this number of the Journal and see what our indefatigable and always optimistic Head Booster has provided for the afternoon and early evening of May 21st. (I wonder if any of us realize the disinterested devotion and the sacrifice of time and comfort the State Medical Society is receiving from the Head Booster every week in the year.)

This meeting is stimulating and inspiring, and if there is any creature on the face of the earth who needs inspiration it is the County Secretary, for he has not only to keep himself supplied with that necessary article, too often in the face of discouraging circumstances, but also, in most cases, to provide a reserve fund for the use of most of the members of his society.

See that your county secretary goes to the meeting, and, if possible, come yourself. It will do you good to take an extra day. The time usually allowed for the State Society meeting is too short. We do not have time to get acquainted with each other. Let us come early to the meeting, stay until it is all over, and get to know each other better.

## SOME DANGERS IN THE USE OF TINCTURE OF IODINE IN SKIN DISINFECTION.

Now that the tincture of iodine has come into common use in the disinfection of the skin prior to operations, some care and discrimina-

tion must be exercised to avoid the unpleasant results which sometimes follow its use.

In cases in which the use of a hot, wet dressing after the operation is contemplated, the use of the iodine is franght with danger, as under these circumstances there is considerable probability of a severe dermatitis developing even if the iodine has apparently been thoroughly washed off with alcohol before the dressings are applied.

The use in the preparation of the patient of a wet dressing over the site of operation, or even the use of a small amount of water in the form of lather for shaving the part, may lead to the development of an iodine dermatitis, unless the skin is very thoroughly dehydrated with alcohol, followed by ether and completely dried before the tincture of iodine is applied.

## DR. HURTY'S ADDRESS AT WAUKESHA.

Under the auspices of the Waukesha County Medical Society Dr. J. N. Hurty of Indianapolis, a member of the Council on Health and Public Instruction of the American Medical Association, delivered an address at the Methodist Church, Waukesha, on April 3rd on the subject of "How Not to Be Sick."

The newspaper accounts of this address are extremely interesting, because they show how ready the papers are to help along the cause of decency and intelligence in medical practice, when it can be presented in a form that will make good, interesting reading matter. The Waukesha papers published long accounts of Dr. Hurty's address, written in an unusually intelligent manner, and also devoted some editorial space to a consideration of the subjects discussed in it.

This method of giving the general public an idea of what the practice of medicine really stands for today has so much to commend it that we hope the example of Waukesha may be widely followed.

## THE EDUCATIONAL WORK OF THE AMERICAN MEDICAL ASSOCIATION.

The "Public Education Number" of the American Medical Association Bulletin, which bears the date of January 15, 1912, contains a large amount of information regarding the work which is being carried on under the general direction of the Council on Health and Public Instruction of the A. M. A. An idea of the scope of the work that is going forward may be obtained from the titles of some

of the committees working under the Council: The Committee on Public Health Education among Women; The National Legislative Conference; Committee on Resuscitation from Electric Shock; Committee on Protection of Medical Research; Committee on Conservation of Vision; Committee on Visual Standards for Pilots.

Beside these and other activities the Council has organized a Speaker's Bureau for the purpose of furnishing speakers on public health topics for public meetings held under the auspices of local or county medical societies, women's clubs, etc., as well as for addresses before universities, colleges, academies, teacher's institutes, farmers' institutes, or any organization interested in the advancement of public health.

In addition, educational pamphlets and cartoons in great variety have been prepared, a mere list of which would occupy more space than we have at our disposal.

In order to make these varied agencies as effective as they deserve to be they must be *used*. The officers of every County Society should obtain a copy of this Bulletin and should look it over carefully to see what it offers to them. There is a wealth of material here to be had for the asking, but we must at least open our eyes and reach out our hands to obtain the benefit of it.

---

## Program Third Annual Meeting of the Association of County Secretaries and State Officers, Waasau.

ST. BOOSTHEIMER'S DAY, May 21, 1912.

ONE-THIRTY P. M.

Annual Address of the President.....W. F. ZIERATH, Sheboygan

Some Things the County Society Can do for the Public Health....
.....HOYT E. DEARHOLT, Milwaukee

DISCUSSION.

FLORA A. READ, Fond du Lac C. H. GEPHART, Kenosha

To Increase the Respect and Confidence of the Laity.....
.....A. R. CRAIG. Secy. A. M. A., Chicago

DISCUSSION.

M. B. GLASIER, Bloomington M. D. BIRD, Marinette

To Advance the Material Interests of Its Members.....
.....R. C. FAULDS, Abrams

DISCUSSION.

J. A. SCHMIDT, Brillion F. P. DOHEARTY, Appleton.

To Aid in Securing Needed Medical Legislation and Enforcement of Present Medical Laws.....A. W. GRAY, Milwaukee

DISCUSSION.

I. E. LEVITAS, Green Bay A. L. BEIER, Chippewa Falls

For The State Medical Journal.....A. W. MYERS, Milwaukee

DISCUSSION.

G. F. DAWLEY, New London

QUESTION BOX. Send in any troublesome question or topic you want brought up for general discussion.

BUSINESS MEETING.

GINGER TEA.

SIX P. M.

Tea-master.....O. T. HOUGEN, Grand Rapids
Tea-Totaler.....C. A. ARMSTRONG, Boscobel
Tea-Singer.....C. S. SHELDON, Madison
Tea-Spooner.....S. M. B. SMITH, Wausau
Tea-Kettler.....S. S. HALL, Ripon

---

**Program of the Sixty-Sixth Annual Meeting State Medical Society of Wisconsin.**

WAUSAU, MAY 22, 23, 24, 1912.

1. Public Housekeeping with Reference to Sanitation.
   DR. JULIA RIDDLE, Oshkosh.

2. Gonorrhoea in Women, with Special Reference to its Prophylaxis and Sequelae.
   DR. CHESTER M. ECHOLS, Milwaukee.

3. Fever, with Obscure, or Absent, Physical Findings. Illustrative Cases.
   DR. EDWARD EVANS, La Crosse.

4. Practical Laboratory Methods.
   DR. J. S. EVANS, Madison.

5. SPECIAL PAPER: Some Important Points in the Diagnosis of Tuberculosis.
   DR. F. M. POTTENGER, Monrovia, Cal.

6. Differential Diagnosis between those Conditions Simulating the Symptom-Complex of Neurasthenia.
DR. ARTHUR W. ROGERS, Oconomowoc.

7. Anti-Typhoid Vaccination. Its Use and Value.
DR. M. P. RAVENEL, Madison.

8. The Auscultatory Blood Pressure Phenomenon.
DR. LOUIS M. WARFIELD, Wauwatosa.

9. A City Health Department.
DR. M. D. FURSTMAN, La Crosse.

10. ANNUAL ADDRESS IN MEDICINE—The Growing Importance of Preventive Medicine.
DR. JOSEPH H. WHITE, U. S. Public Health and Marine Hospital Service.

11. The Diagnosis and Treatment of Foreign Bodies in the Eye, with Röntgen Ray Localization of Same.
DR. G. I. HOGUE AND DR. E. S. BLAINE, Milwaukee.

12. General Principles in the Treatment of Fractures with X-Ray Plates.
DR. CHARLES H. LEMON, Milwaukee.

13. The Pathology and Diagnosis of Acute Surgical Diseases of the Abdomen.
DR. D. R. CONNELL, Beloit.

14. Symptoms and Diagnosis of Pathological Conditions of the Cecum and Terminal Ileum.
DR. NEIL ANDREWS, Oshkosh.

15. ANNUAL ADDRESS IN SURGERY—Subject not Announced.
DR. W. D. HAGGARD, Nashville, Tenn.

16. The National Importance of Eugenics.
DR. FRANK I. DRAKE, Madison.

17. The Value of Overriding as a Method of Curing Diphtheria Carriers.
DRS. W. F. LORENZ AND M. P. RAVENEL, Madison.

18. Non-suppurative Nasal Sinus Diseases.
DR. SAMUEL G. HIGGINS, Milwaukee.

19. Non-surgical Treatment of Otitis Media.
DR. O. N. MORTENSON, Waupaca.

## NEWS ITEMS AND PERSONALS.

Kenosha has thirty-seven cases of **scarlet fever** and five cases of diphtheria.

**Dr. C. G. Greengo** of Chilton is spending the winter in California. Dr. Rothert has charge of his practice.

**Dr. J. E. Meany** of Manitowoc and **E. M. Farrell** of Two Rivers have formed a partnership at Manitowoc.

Contagion, particularly **scarlet fever**, is reported from many cities in the state, but especially in Kenosha, Monroe and Chippewa Falls.

**Dr. J. N. Aubin,** Peshtigo, who is at a sanatorium in Chicago, is reported much improved. He expects to return to his practice at an early date.

**Kenosha** is to have a new isolation and emergency hospital. At a meeting of the common council on April 11th, $2,000 was appropriated for this purpose.

**Dr. C. E. Smith,** Beloit, met with an accident on March 17th. While walking on a slippery sidewalk he slipped and fell, breaking his right leg above the ankle.

**Dr. Hugo F. Mehl,** Milwaukee, has received an appointment as examining surgeon of the pension board from the commissioner of pensions, succeeding Dr. G. A. Bading, resigned.

Five **scarlet fever** cases are being treated at the Madison contagious hospital. In Baraboo a number of cases have developed, and the public schools of that city have been closed for one week.

**Dr. Ira Remsen,** president of the Johns Hopkins University, Baltimore, Md., tendered his resignation on April 11th. He will, however, retain the professorship of chemistry at the University.

An epidemic of **scarlet fever** has broken out in Monroe. Fifteen cases have developed. The state board of health is in touch with the situation and the quarantine law is being strictly enforced.

**Dr. Fred Brush** has resigned the superintendency of the New York Post-Graduate Medical School and Hospital, to become superintendent of the Burke Relief Foundation, and engage in the planning and organization of the Convalescent Hospital, to be erected at White Plains, N. Y., on the sixty acre plot of land recently purchased. McKim, Mead and White are the architects, and a new type of institution and work for the care of the city's sick will be established.

**Dr. G. A. Bading,** Milwaukee, was elected mayor of that city on April 2nd, on the non-partisan ticket.

The office of **city physician** for Milwaukee will be created this year if

the plans of the law department are carried out. A city physician is desired to take care of injured city employees under the new workingmen's compensation act. With a city physician the law department will be better able to handle the claims.

**The Oconomowoc Health Resort** recently announced the opening of a new building, comprising twenty-seven guest rooms and a large assembly room and gymnasium.

The new building is constructed along the same lines as the first and is absolutely fireproof. One section has been absolutely isolated and especially equipped with private baths and porches for the care of acute and disturbed mental cases.

The same plan has been carried out as in the first building, to do away with all appearance of restraint and give the institution as home-like an atmosphere as possible, compatible with the proper care of its patients.

Dr. Rogers continues to reside in the building, giving his personal attention to his patients.

**Removals.** Dr. J. J. Curtin, Wabeno to Duluth.

Dr. C. A. Lathrop, Sharon to Tomahawk.

Dr. E. T. Ridgeway, Tigerton to Ripon.

Dr. P. P. Gilberson, Black Earth to Story City, Iowa.

Dr. Chas. Meyst, East Troy to Burlington.

Dr. John Corbett. Lowell to St. Johns, Oregon.

Dr. G. R. Randall, health officer at South Milwaukee, has given up his practice in that city and will take up work with Dr. Malone at Milwaukee.

Dr. Frank Hager of Fredonia has opened an office at Denmark.

Dr. Robert Lloyd Williams, formerly of Pine River in this State, and more recently of Denver, Colorado, has taken over the practice of Dr. R. H. Buckland of Green Lake, who retires temporarily from active practice.

**Deaths.** Dr. C. M. Smith, Sr., Evansville, died on April 3, 1912, aged 77 years.

Charles M. Smith, Sr., was born in Cattaraugus County, New York, June 25, 1834. His early education was received in the district school. For a time he was employed as a clerk in a drug and commission store in Forestville, N. Y. In 1854 he came to Wisconsin. When the school at Dayton was organized he was chosen as the first teacher. He afterwards taught two terms in the Evansville school, and then entered the academy in Albion, from which he was graduated in 1856. Dr. Smith first read medicine with Dr. Evans, later attending and graduating from Rush Medical College in 1860. He first practiced at Footville, where he lived for two years. He was appointed assistant surgeon to the 13th Wisconsin Volunteer Infantry, in which position he served throughout the war. At the close of the war he returned to Wisconsin and located in Evansville, where he formed a partnership with Dr. Evans, that lasted for eighteen years. In 1873 he took a special course at Bellevue Hospital Medical College, New York.

He was a member of Rock County and the State Medical Associations.

Dr. Russell Broughton, founder of the sanitarium which bears his name,

died at the institution on April 9, 1912, aged 69 years. Death was due to angina pectoris.

Dr. Broughton was a native of Wisconsin. born at Racine, May 16, 1842. He studied in the public schools, Milton College and the old Bryant and Stratton College in Milwaukee. He later entered Rush Medical College and graduated in 1869. He practiced at Brodhead, Wisconsin for twenty-one years. For ten years he was connected with the Kelley Institute at Dwight, Illinois, from there going to the Ransom Sanitarium at Rockford. In 1902 Dr. Broughton took possession of the present sanitarium at Rockford, Ill.

Dr. Frank Cogswell, for many years located at Kenosha, died on March 18th at Seattle, Wash.

Dr. Cogswell was born at Kenosha in 1846. Was educated at Allen Grove and Beloit College and was a graduate of the Northwestern University Medical School, 1876. After leaving Kenosha Dr. Cogswell practiced in Kansas fifteen years, from there he removed to Seattle, Wash.

Dr. F. L. D. Rust, formerly of Eau Claire, died at Boston, Mass., April 9th, aged 40 years. He was at one time connected with the Northern Hospital for the Insane at Winnebago.

**The American Proctologic Society** will hold its fourteenth annual meeting at Atlantic City, N. J., June 3 and 4, 1912.

PROGRAM.

Annual address of the President—Subject: The Relationship and the Duties of the Proctologist to the Profession. John L. Jelks, Memphis, Tenn.

PAPERS.

1. A Review of Proctologic Literature for 1911—Samuel T. Earle, Baltimore, Md.

2. Post-Operative Care of Rectal Cases.—Wm. M. Beach, Pittsburgh, Pa.

3. Patulous Anus—Its Clinical Significance.—Alfred J. Zobel, San Francisco, Cal.

4. The Three-Step-Operation in Tumors of the Sigmoid and Colon.—James P. Tuttle, New York City, N. Y.

5. A Study of Cases of Constipation by the Use of the Roentgen Ray.—Arthur F. Holding. New York City, N. Y.

6. Valvotomy.—George B. Evans, Dayton, Ohio.

7. Multiple Adenomata of the Rectum. A Report of a Case with Symptomatic Relief by Simple Remedies.—E. H. Terrell, Richmond, Va.

8. Pigmentation of the Rectum and Sigmoid.—Jerome M. Lynch, New York City, N. Y.

9. Observations Upon the Relationship of Tuberculosis to Peri-Rectal Suppurations.—Collier F. Martin. Philadelphia, Pa.

10. Ano-Rectal Disease Due to Venereal Infection.—J. A. McVeigh, Detroit, Mich.

11. Further Observations on Pruritus Ani: Its Probable Etiologic Factor.—Dwight H. Murray, Syracuse, N. Y.

12. Colonic Dilation (Congenital and Acquired) as a Factor in Chronic Intestinal Obstruction (Obstipation).—Samuel G. Gant, New York City, N. Y.

13. Acute Post-Operative Intestinal Paresis.—J. A. MacMillan, Detroit, Mich.

14. Prevention and Treatment of Post-Operative Retention of Urine.—Frank C. Yeomans, New York City, N. Y.

15. Intra-Rectal Rupture of Suppurating Sinus from Hip-Joint Disease.—Ralph W. Jackson, Fall River, Mass.

16. (a) Keloidal Tuberculoma. (b) Fibromatous Keloid.—Alois B. Graham, Indianapolis, Ind.

17. Differential Diagnosis of Ulcers of the Rectum.—Leon Straus, St. Louis, Mo.

18. The Surgery of Colonic Obstipation.—Louis J. Hirschman, Detroit, Mich.

19. Rectal Carcinoma.—J. Rawson Pennington, Chicago, Ill.

20. Reflex Disturbances Referable to the Rectum.—T. Chittenden Hill, Boston, Mass.

21. Some Practical Points Gleaned from the Observations of a Proctologist.—Samuel T. Earle, Baltimore, Md.

22. Some Practical Considerations of the Etiology of Diarrhea and its Treatment.—J. Coles Brick, Philadelphia, Pa.

23. Venereal Affections of the Anus and Rectum.—Edward A. Hamilton, Columbus, Ohio.

---

**Decompression of the Orbit by Removing the Lateral Orbital Wall in Excessive Exophthalmus (Graves' Disease) and Consecutive Affection of the Cornea.** DOLLINGER, JULIUS. (From the 1st Surgical Clinic in the University of Budapest. Deutsche Med. Woch., 1911, To. 41 p. 1888). So far the treatment for protection of the cornea in excessive exophthalmus consisted in applications and cantho-plasty. If, however, the exophthalmus rapidly increased the necrotic process was thereby accelerated and the eye lost. Therefore D. thought of reducing the exophthalmus by dividing it into an anterior and lateral one by removal of the lateral orbital wall. This was done in a man, aged 62, with excessive bilateral exophthalmus with chemosis and ulceration of the left cornea and severe pain. The lateral orbital wall was laid open by an oblique incision through the temporal muscle from the forehead to the ear, guarding the orbicularis muscle, and a wedge shaped piece (apex back, base in front) of the bone extirpated. Only the skin was sewed, not the temporal muscle. The contents of the orbit bulged now to the side. After canthorrhaphy the ulcer of the cornea healed rapidly, chemosis and pain disappeared, and the exophthalmus was diminished. From this favorable result D. recommends this operation in excessive exophthalmus in Graves' disease, if chemosis sets in, but before the cornea is affected.—C. Zimmermann.

---

# THE STATE MEDICAL SOCIETY OF WISCONSIN

ORGANIZED 1841

## Officers 1911-1912.

J. M. DODD, Ashland, President.

T. J. Redelings, Marinette — 1st Vice President.

C. A. Armstrong, Boscobe — 2d Vice-President.

H. E. Dearholt, Milwaukee, 3rd Vice-President.

CHAS. S. SHELDON, Madison, Secretary. S. S. HALL, Ripon, Treasurer.

ROCK SLEYSTER, Waupun, Assistant Secretary.

## Councilors.

TERM EXPIRES 1917.

1st Dist., M. R. Wilkinson, - Oconomowoc
2nd Dist., G. Windesheim, - - Kenosha

TERM EXPIRES 1914.

7th Dist., Edward Evans, - - La Crosse
8th Dist., T. J. Redelings, - Marinette

TERM EXPIRES 1912.

3rd Dist., F. T. Nye, - - Beloit
4th Dist., W. Cunningham, - - Platteville

TERM EXPIRES 1915.

9th Dist., O. T. Hougen, - - Grand Rapids
10th Dist., R. U. Cairns, - - River Falls

TERM EXPIRES 1913.

5th Dist., J. V. Mears, - Fond du Lac
6th Dist., H. W. Abraham Appleton

TERM EXPIRES 1916.

11th Dist., J. M. Dodd, - Ashland
12th Dist., H. E. Dearholt, Milwaukee

## Delegates to American Medical Association.

L. F. Bennett, Beloit. C. S. Sheldon, Madison. A. H. Levings, Milwaukee

## Alternates.

F. S. Wiley, Fond du Lac. Wilson Cunningham, Platteville. R. G. Savle, Milwaukee

## Committee on Public Policy and Legislation.

A. W. Gray, Milwaukee, Chairman. J. P. McVahon, Milwaukee. F. F. Bowman, Madison.

## Committee on Medical Defense.

G. E. Seaman, Milwaukee, Chairman. S. S. Hall, Ripon. A. J. Patek, Milwaukee.

## Committee on Prevention of Tuberculosis.

C. A. Harper, Madison. G. E. Seaman, Milwaukee. M. P. Ravenel, Madison
J. M. Beffel, Milwaukee. C. H. Stoddard, Milwaukee.

## Program Committee.

A. W. Gray, Milwaukee, Chairman.

## NEXT ANNUAL SESSION, WAUSAU, MAY 22, 23 AND 24, 1912.

The Wisconsin Medical Journal, Official Publication.

## LIST OF EXECUTIVE OFFICERS OF COUNTY MEDICAL SOCIETIES.

| County. | President. | Secretary. |
|---|---|---|
| Ashland-Bayfield-Iron | J. M. Meyers, Odanah | J. M. Dodd, Ashland. |
| Barron-Polk-Washburn-Sawyer-Burnett | H. B. Crommett, Amery | I. G. Babcock, Cumberland. |
| Brown-Kewaunee | T. J. Oliver, Green Bay | I. E. Levitas, Green Bay. |
| Calumet | W. Martens, New Holstein | J. A. Schmidt, Brillion. |
| Chippewa | C. A. Hayes, Chippewa Falls | A. L. Beier, Chippewa Falls. |
| Clark | H. H. Christofferson, Colby | E. L. Bradbury, Neillsville. |
| Columbia | B. C. Meacher, Portage | A. J. Batty, Portage. |
| Crawford | A. E. Dillman, Steuben | A. J. McDowell, Soldiers Grove. |
| Dane | Joseph Dean, Madison | C. S. Sheldon, Madison. |
| Dodge | J. A. Clason, Neosho | G. W. Henika, Beaver Dam. |
| Door | | |
| Douglas | T. J. O'Leary, Superior | W. E. Hatch, Superior. |
| Dunn-Pepin | F. H. Grannis, Menomonie | L. A. Dahl, Menomonie. |
| Eau Claire | H. A. Fulton, Eau Claire | E. L. Mason, Eau Claire. |

| County. | President. | Secretary |
|---|---|---|
| Fond du Lac | G. F. Scheib, Fond du Lac | F. A. Read, Fond du Lac. |
| Grant | C. R. Pickering, Muscoda | M. B. Glasier, Bloomington. |
| Green | L. A. Moore, Monroe | G. S. Darby, Brodhead. |
| Green Lake-Waushra-Adams | G. E. Baldwin, Green Lake | R. H. Buckland, Green Lake. |
| Iowa | W. S. Lincoln, Dodgeville | W. M. Gratiot, Mineral Point. |
| Jefferson | L. J. Bennett, Ft. Atkinson | C. R. Feld, Watertown. |
| Juneau | C. O. Cron, Camp Douglas | A. T. Gregory, Elroy. |
| Kenosha | H. A. Robinson, Kenosha | C. H. Gephart, Kenosha. |
| La Crosse | C. H. Marquardt, La Crosse | G. W. Lueck, La Crosse. |
| Lafayette | J. C. Hubenthal, Belmont | Susanne Orton, Darlington. |
| Langlade | M. J. Donohue, Antigo | J. C. Wright, Antigo. |
| Lincoln | C. C. Walsh, Merrill | Herbert Saylor, Merrill. |
| Manitowoc | J. R. Currens, Two Rivers | A. J. Shimek, Manitowoc. |
| Marathon | L. E. Spencer, Wausau | S. M. B. Smith, Wausau. |
| Marinette-Florence | H. F. Schroeder, Marinette | M. D. Bird, Marinette. |
| Milwaukee-Ozaukee | J. J. McGovern, Milwaukee | Daniel Hopkinson, Milwaukee. |
| Monroe | A. E. Winters, Tomah | A. R. Bell, Tomah. |
| Oconto | J. B. Atwood, Oconto | R. C. Faulds, Abrams. |
| Oneida-Forest-Vilas | J. M. Hogan, Oshkosh | C. A. Richards, Rhinelander. |
| Outagamie | J. S. Reeve, Appleton | F. P. Dohearty, Appleton. |
| Pierce | E. R. Holliday, Ellsworth | S. F. Rudolf, Ellsworth. |
| Portage | J. D. Lindores, Stevens Point | W. F. Cowan, Stevens Point. |
| Price-Taylor | C. E. Nystrum, Medford | G. H. McClure, Westboro. |
| Racine | E. A. Taylor, Racine | Susan Jones, Racine. |
| Richland | P. G. Lasche, Ithaca | A. D. Campbell, Richland Center. |
| Rock | W. J. Allen, Beloit | E. B. Brown, Beloit. |
| Rusk | G. M. Carnahan, Bruce | W. F. O'Connor, Ladysmith. |
| Sauk | | Roger Cahoon, Baraboo. |
| Shawano | E. Puckner, Wittenberg | Dr. Steubenvoll, Shawano. |
| Sheboygan | G. H. Stannard, Sheboygan | W. F. Zierath, Sheboygan. |
| St. Croix | Lorne Campbell, Clear Lake | W. H. Banks, Hudson. |
| Trempealeau-Jackson-Buffalo | C. F. Peterson, Independence | H. A. Jegi, Galesville. |
| Vernon | John Schee, Westby | F. E. Morley, Viroqua. |
| Walworth | H. C. Miller, Whitewater | M. V. Dewire, Sharon. |
| Washington | F. P. Leich, Jackson | S. J. Driessel, Barton. |
| Waukesha | R. E. Davies, Waukesha | Sara T. Elliott, Waukesha. |
| Waupaca | T. E. Loope, Iola | G. T. Dawley, New London. |
| Winnebago | B. C. Gudden, Oshkosh | W. L. Herner, Winnebago. |
| Wood | J. A. Jackson, Rudolph | J. B. Vedder, Marshfield. |

## SOCIETY PROCEEDINGS.

---

## SECRETARY'S NOTES.

### COLLECTIONS.

Barely one month remains before our Annual Meeting at Wausau, May 22d. In view of this fact, it behooves us to set our house in order at once,—to burn our bridges behind us,—and highly resolve that we will come up to our Annual Round-up with our ranks unthinned, with a fresh enthusiasm, and with victory perching upon our banners. This sounds well, but, to make it mean anything, we must, every man of us, set to, and do some genuine, hard work before the 22d.

We all agree that the membership roll is a vitally important factor in the life of the Society, and we are justly gratified that each year has shown a steady increase in our numbers. This is an honorable record, and it must be maintained.

As is usual, at this time of the year, collections are somewhat

slow and discouraging. To date, of our 53 County Societies, but 32 have sent in their annual report. Of these, 25 show a loss, as compared with the total number in 1911, 4 have gained, and 3 are the same as last year. The losses foot up 118, and the gains 11, making a net loss in the 32 Counties, thus far, 107. The largest loss is 12, and the largest gain 5. This showing is not as bad as it appears, since these are the figures, mostly, of the initial reports, and we shall have delinquents straggling in up to the time of the Annual Meeting.

It is well to bear in mind that our meeting this year is about one month earlier than usual, and we have so much less time in which to work. So we have to begin work earlier, and push the campaign harder if we are to make a respectable showing at the meeting.

As we often remark, these 53 County Secretaries are the "main spoke in the wheel" and upon their tact, zeal, and industry depends almost wholly, the outcome. As a matter of fact, they are, almost without exception, already doing their very best, sometimes under the most adverse circumstances. What I want to ask the members of the Society, is to give them a "square deal", and treat them "half-way decently". When you are politely requested to pay your yearly dues, do so at once, and do not make it necessary for the Secretary to dun you over and over again for the money you expect to send him all the time.

Not only so, but you should do more than this. The other 1,600 members of the Society should be equally interested in maintaining a successful organization and should give their Secretary aid in many ways. They can help him to round up the "hard cases",—send him the names of new doctors in their locality, and, in various ways, make him feel that he is not bearing the whole burden alone.

Then we have our 12 Councilors,—12 Bishops,—each with a diocese to watch and care for. They are willing and anxious to help if only given a chance. I think they would take a more active and interested part in the County Societies if they were only asked to do certain specific things, instead of giving advice in a general way. For example, I am asking each County Secretary to send a list of the names of the delinquents in their Society to their Councilor, asking him to write each one of them urging a renewal of their membership. If all the Councilors will promptly comply with these requests it will materially aid the County Secretaries where they most need help. These personal letters from the officials of the State Society have often been the deciding factor, both in gaining new members and securing renewals.

As stated above, twenty-one Societies have not yet reported and it is of the utmost importance that they do so at the earliest possible moment. Each year the State Secretary is brought to a state bordering on nervous prostration by the fact that many reports are not sent in until almost the very last day before the meeting. *Some* we usually get *during* the meeting. Of course, it is impossible for the State Secretary to make out a complete or satisfactory annual report under such conditions. According to our by-laws, all societies not sending in their reports by April 15th, are "held as suspended" and will remain so till their reports are sent in. This is a most mortifying position for these societies which cannot be obviated too quickly.

## THE ANNUAL MEETING

at Wausau should receive the serious attention of every member of the Society. Those who attended the last meeting at Waukesha will agree that it *pays*, once a year—to put business aside, and spend two or three days with their medical brethren of the State in discussing medical topics, getting better acquainted and having a good time generally. That meeting was—without question—the best we ever held and the one this year promises to be equally good. This is the first time we have ever met in that part of the State and the Medical Profession of the whole region is anxious to give us a most hearty welcome. The arrangements for the meeting have been completed and are most satisfactory.

The Meeting of the County Secretaries will be held on Tuesday afternoon, and the first, and most important, meeting of the House of Delegates, Tuesday evening.

On Wednesday evening, a Smoker will be held at the Elk's Club Rooms, and the Ladies' Reception at the Wausau Club House. On Thursday evening there will be an Automobile Ride and the Annual Banquet at Rothschild's Pavilion.

These occasions will be—as usual—thouroughly enjoyable and you cannot afford to miss them.

As to the Scientific Program, Fred Gray, Chairman Program Committee has promised to give us a better bill of fare, even than he did last year, which ought to satisfy everybody.

The Address in Medicine will be given by Dr. Joseph H. White of the U. S. Public Health and Marine Hospital Service, and the Address in Surgery by Dr. W. D. Haggard of Nashville, Tenn.

To hear the Addresses alone, and meet these distinguished members of the profession, will be well worth going to Wausau.

The preliminary program of papers will appear in this number of the Journal and every member is earnestly requested to look over the list and come to the Meeting prepared to discuss at least one subject with "the spirit and the understanding." The discussions *ought* to be the very best feature of the meeting and we can *make* them so if we actually make the effort.

So, once more, let us all go up to this Wausau Meeting and have a real good time. It is the only time in the whole year that we have a chance to greet one another, and renew our acquaintance, and get a realizing sense that we are part and parcel of the finest body of men in the State of Wisconsin.

Bring your wife, if your are lucky enough to have one, and bring along enough clean collars to last till the final word is spoken.

C. S. S.

## CALUMET COUNTY MEDICAL SOCIETY.

The Calumet County Medical Society met at Forest Junction, March 21, 1912. Meeting called to order by the President. Dr. William Martens. The following members were present: Drs. Martens, McComb, MacCollum, Botton, N. J. Knauf, F. P. Knauf, Niemann and Schmidt. Visitors: Drs. A. H. Purdy, Milwaukee; Rothert, Chilton; Eggloff and Schmitz, Elkhart Lake.

Minutes of last meeting read and approved. The President appointed Dr. F. P. Knauf censor for three years. Dr. Purdy then read a very interesting paper on "Acute Inflammatory Diseases of the Skin, as Acute Eczema and Acute Dermatitis." A vote of thanks was extended Dr. Purdy for his interesting paper.

After the meeting a supper was served at the Hotel Thomas. The night meetings at Forest Junction have been among the best in the history of the Society.

## CHIPPEWA COUNTY MEDICAL SOCIETY.

The Chippewa County Medical Society held its annual meeting April 1st. The following officers were elected for the ensuing year: President, Dr. C. A. Hayes; Vice-President, Dr. J. D. McRae; Secretary-Treasurer, Dr. A. L. Beier; Delegate, A. L. Beier; Alternate, C. W. Wilkowski; Censors, Drs. C. N. Abbott, H. H. Hurd and C. W. Wilkowski.

Although our success in the past has been lamentably limited and extremely discouraging, I believe I see through the mists the dawn of a new day for our organization. The officers have decided to make this the "banner year" of the Chippewa County Medical Society.

A. L. Beier, M. D., *Secretary.*

## DANE COUNTY MEDICAL SOCIETY.

Tuberculosis, especially as it relates to Madison and Dane County, were discussed at a meeting of the Dane County Medical Society, held at Madison on March 12th.

The program was as follows: "The Economic Loss of Tuberculosis in its Relation to Occupation." L. W. Hutchcroft, Statistician State Board of Health.

"The Tuberculosis Situation in Madison, Present and Future." Prof. W. D. Frost.

"A Method to Secure a Tuberculosis Sanatorium for Dane County." Dr. Joseph Donovan.

"The Advantages of County Sanatoria for Tuberculosis." Dr. C. A. Harper, Secretary State Board of Health.

## FOND DU LAC COUNTY MEDICAL SOCIETY.

The Fond du Lac County Medical Society held a meeting and banquet at the Bellevue Restaurant, Fond du Lac, on March 13th.

## KENOSHA COUNTY MEDICAL SOCIETY.

The regular monthly meeting of the Kenosha County Medical Society was held at the Hotel Kenosha with twenty-four members in attendance.

Dr. E. C. Dudley of Chicago favored the Society with an instructive lantern lecture on "The Disposition of the Broad Ligaments in Pelvic Surgery."

Dr. Windesheim, chairman of our new Board of Health, asked the co-operation of the Society in stamping out the scarlet fever epidemic. The members agreed to assist in the daily inspection of the Public Schools.

Following the program, dinner was served.

C. H. Gephardt, M. D., *Secretary.*

## ROCK COUNTY THIRD COUNCILOR DISTRICT MEDICAL SOC.

Rock County and the 3rd Councilor District Medical Societies held a joint meeting at Beloit on March 25th. About fifty or sixty physicians were in attendance.

PROGRAM.

"Fever, Its Nature and Significance." Dr. Victor C. Vaughn, Ann Arbor.

"Bacterial Vaccines in Everyday Practice." Dr. A. C. Helm, Beloit.

"Crushing Injuries of the Extremities." Dr. H. W. Palmer, Janesville.

"The Danger and Folly of Buttonhole Incisions." Dr. A. G. Sullivan, Janesville.

"The Technique of the Gynecological Department of the Wesley Hospital." Dr. Thomas J. Watkins, Chicago.

"Some Relax Conditions Requiring Treatment in Surgical Cases." Dr. W. A. Munn, Janesville.

Dinner at the Hotel Hilton at 6:30, followed by an evening session in the Wilson Opera House.

Public Address, "The Influence of Disease on Civilization." by Dr. Victor C. Vaughn, Ann Arbor, Mich.

## SHAWANO COUNTY MEDICAL SOCIETY.

Shawano County Medical Society held a meeting at the First National Bank, Shawano, on March 18th. Physicians from Green Bay, Wittenberg and Gresham attended the meeting. Two interesting papers were read: Dr. Julius Bellin, Green Bay, spoke on "The Logic of Abdominal Pains." Dr. Joseph Bellin, Green Bay, on "Certain Facts Concerning Faucial Tonsils."

## WOOD COUNTY MEDICAL SOCIETY.

Wood County Medical Society held a meeting at Marshfield on March 28th. A smoker at the Elks Club Room followed the meeting.

PROGRAM.

Treatment of Damaged Tendons. Dr. J. A. Jackson, Rudolph.

Cases of Internal Derangement of the Knee Joint. Dr. K. W. Doege, Marshfield.

Anesthetics. Dr. George Pomainville, Nekoosa.

Gonorrheal Rheumatism. Dr. J. C. Hayward, Marshfield.

Pepsin. Dr. W. G. Merrill, Grand Rapids.

## INTERURBAN ACADEMY OF MEDICINE.

The Interurban Academy of Medicine, comprising physicians of Superior and Duluth, held a banquet at the Commercial Club, Superior, on March 20th. About thirty attended.

Dr. John G. Cross of Minneapolis read a paper on Anemia.

Dr. C. A. Saunders of Superior is president, and Dr. L. A. Potter, Superior, is secretary.

## NORTH SIDE PHYSICIANS CLUB.

The North Side Physicians Club, Milwaukee, held its annual meeting on April 11th. Following is the result of the election: President, Dr. Arnold Drexel; Vice-President, Dr. A. E. Mieding; Secretary, Dr. Wm. G. Weidman; Treasurer, Dr. Louis Schmidt.

State Senator Henry Bodenstab explained the income tax law as applied to the income of physicians.

## THE ASSOCIATION OF COUNTY SECRETARIES AND STATE OFFICERS OF THE STATE MEDICAL SOCIETY OF WISCONSIN.

W. F. ZIERATH, M. D., Sheboygan
President.

M. V. DEWIRE, M. D., Sharon
Vice-President.

ROCK SLEYSTER, M. D. Waupun, Secretary.

NEXT ANNUAL SESSION, WAUSAU, 1912.

**Under this heading will be published each month, papers, editorials, sermons, reports of meetings and all that relates to the County Medical Societies of the state. To it all are invited and asked to contribute, especially the County Secretary. It is yours—make good use of it, and may it be of help to every County Society. It will be edited by Rock Sleyster of Waupun, secretary of the new association, to whom all communications for this department, reports of meetings and news matter should be addressed.**

## BOOSTER SERMON.

### The Secretaries' Meeting.

This year's meeting promises to be by far the best in the history of the Association. It is of the greatest importance that your county secretary attend. Write him now, while you think of it, and urge him to do so. All interested in organization work are invited to come. As the first meeting of the House of Delegates is held the same evening, all delegates can easily attend by arriving at noon instead of at dinner time.

The program is splendid, and should be of the utmost value to every county officer. Some of our societies exist and meet regularly, accomplishing little or nothing, blissfully ignorant of the splendid work they might do if it were only pointed out to them. The theme of the 1912 meeting is to be "What work can the County Society do to benefit the public and its members." Dr. Alexander R. Craig, Secretary of the American Medical Association will speak on the relation of the society to the public. Dr. Gray, chairman of the State Legislative Committee, will outline the work that can be accomplished in securing needed legislation and what can be done for the enforce-

ment of what we have. This is a subject that every county society needs light on. Every society should have a representative present to hear this paper. Dr. Dearholt is splendidly equipped to tell what we can do to aid in the modern public health work. This is work our profession should be backing, and it is a serious reflection to note that in general it is the charity and social workers who have gone to the front while the medical man stood idly by. All who heard Dr. Zierath's splendid practical paper at Waukesha will be interested in hearing the President's address this year. Dr. Faulds will speak on what we can do for our own members. Dr. Myers will tell how, now that we own our Journal, we can make it bigger and better the coming year.

Don't forget the question box. Send in your troubles for a general discussion. Someone is sure to have met the same trouble and solved it. Mail them to me or bring them with you. As to the "Ginger Tea"—'nough said! Don't miss it! BE A BOOSTER AND COME.

ROCK SLEYSTER, *Secretary.*

---

## PREVENTIVE MEDICINE.*

BY A. EGDAHL, M. D.,

MENOMONIE.

*Gentlemen of the Association and Fellow-Secretaries:*

I have no formal paper to present. All I wish to do is simply to give a talk upon the relation of preventive medicine to the County Societies, and what can be done to interest the country practitioners and general practitioners in the subject.

It has been well said that the work of the doctor consists in relieving pain, where possible, and in the prevention of disease. I believe the highest and noblest is preventive medicine. It is the medicine of the future. And I believe that every general practitioner who is a member of a county society should be given opportunities to learn what is being done along this line. The method of giving this information is rather a vague one to my mind, and all I shall attempt to do is simply to present to you what can be done in the county societies and through organization.

*Read at the Second Annual Meeting of the Association of County Secretaries and State Officers, Waukasha, June 6, 1911.

The fact is that there are several diseases which troubled the doctor to a considerable extent years ago, that are now rare diseases, and the reduction in the mortality and prevalence of these diseases should be made known to the doctors. A hundred, or even seventy-five years ago typhus fever was quite prevalent in some parts of Europe, and in other parts of the world. In some parts of Europe today it is regarded as a curiosity. And there are other diseases which formerly were prevalent and now are very rare. A simple interest in preventive medicine on the part of the public, will prevent the reintroduction of those diseases which were very prevalent formerly.

The same is true of leprosy. Leprosy is rare in countries where active, intelligent, prophylactic remedies are taken up, while in the Middle Ages it was just as prevalent as other diseases are today.

Bubonic Plague and Cholera used to carry away thousands of people in Europe and in this country, but now they are headed off whenever they make their appearances. Prevalent as they are today in Asia, they never succeed in getting over into our country, thanks to the knowledge of the bacteriology of these diseases. If facts like these are brought out, we should have very active interest in the meetings devoted to the subject of "Preventive Medicine."

Among the diseases that we are familiar with here in Wisconsin are tuberculosis and typhoid fever. Tuberculosis is a disease that stands high as a cause of death in our state. Typhoid fever is also a disease which stands high as a cause of death.

In regard to the prevention of tuberculosis, the Wisconsin Anti-Tuberculosis Society has done excellent work, and every society has, I believe, received information in regard to what can be done along this line. We should have meetings devoted to the consideration of preventive medicine, and papers along this line should be presented at every meeting. I believe it would add a great deal to the effectiveness of this work if every man had printed rules giving explicit directions for the prevention of the spread of this disease, which could be handed out to patients whenever they presented themselves. The expense for these papers should not be borne by the medical men, but should be borne by some organization which is interested in this work, or possibly by the Medical Society itself. In regard to typhoid fever, the same might also be said. We should have printed rules to present to every patient, and the family of every patient where there is a case.

The State Hygienic Laboratory at Madison is rendering very valuable service to the general practitioner in the diagnosis of this disease, and I wish to call attention to one point in regard to what they are doing in relation to diphtheria. The diagnosis of diphtheria should not depend on clinical examinations.

It is now required in many of our municipalities and in some countries that every case should have at least two negative cultures before they are released. Now I understand that the Hygienic Laboratory at Madison is prepared to do this work with any case of possible diphtheria and they stand ready to make cultures and microscopic examinations. This is a very valuable means for the prevention of the spread of disease. All this work is done without expense.

Now there are some other things that the Hygienic Laboratory is doing, also without expense. The microscopical examination of tissues is made without expense, the test for typhoid fever is made without expense, the examination for rabies is made without expense, and as I have already stated, the examinations in cases of tuberculosis and diphtheria are also made without expense. This is a very valuable service, I believe, to a great number of physicians, and I believe that the secretaries should call the attention of every member of our society to this point. There are quite a number of doctors who do not know that they are rendering such valuable service.

Another very valuable work that is being done by the Hygienic Laboratory comes to my mind, the treatment in case of prospective rabies is given for only a moderate charge, or possible in some cases without expense.

Dr. Sheldon: A large number are being treated at present, as you say, at no expense, or where people pay very moderately.

Dr. Egdahl: It comes to my mind that rabies is increasing in this state. I understand there have been something like 124 cases examined at the Hygienic Laboratory, and it seems to me the disease is spreading throughout our state, from the south, northward, up towards the upper peninsula of Michigan.

Another very valuable piece of work rendered by the State Hygienic Laboratory and by the University will be the starting of a school for the instruction of public health officials. I understand this school will be opened next fall, and public officials will be given every opportunity to become acquainted with modern methods in this field, and in the prevention and stamping out of diseases whenever they occur.

Now it has been said that active work in preventive medicine may curtail the work of the medical profession, but I do not believe it. I believe the public is coming to demand that every doctor should know something about preventive medicine. I think we should have meetings three or four times a year, dealing with preventive medicine. There is something on etiology and bacteriology in most programs, or at every meeting probably, but very little on preventive medicine. The public, as I say, is beginning to demand that we doctors should know something about preventive medicine, and possibly we will have to have preventive surgery as well as preventive medicine some time in the future.

I have only mentioned infectious and contagious diseases, for the reason that most of the work in preventive medicine can be done along this line. Preventive surgery is making progress. Preventive cancer is already being discussed in quite a number of our meetings. Only recently I read a paper on that subject, which appeared in a European medical journal.

And I have not mentioned what might be done by having a medical inspector in the schools. This is very important in checking tuberculosis and a number of other diseases after they are started. The medical inspector in the school is extremely important, and I am confident if this work is done it will head off a great number of diseases at their very start.

The service rendered by hospitals is a part of preventive medicine also, and in Boston, New York and other cities the social service department of hospitals is assuming an aspect of importance.

Again, the prevention of venereal diseases is an important part of preventive medicine which has, as yet, not been developed to any extent.

What I wished to emphasize is the fact that we should try to have or create a greater interest in the subject of preventive medicine in our medical societies. The prevention of tuberculosis really rests with the doctor, and this is a disease that we are now attacking, and it promises very good results. Typhoid fever is also preventable. But the prevention of tuberculosis especially is the most important work we can pursue. All I wished to do was simply to offer suggestions in regard to what might be done to create an interest in our medical societies in preventive medicine.

## DISCUSSION.

Dr. H. E. Dearholt, Milwaukee: I am very glad indeed to hear Dr. Egdahl express the opinion that going into preventive medicine on the part

of physicians will not necessarily decrease the financial income of the physician. It seems to me very happy, coming right after the talk on the business side of the medical profession. I think that in the past there has been altogether too much cant—a little too much rather insincere self praise amongst doctors in their meetings for the great amount of work that they contribute gratuitously. I have been given an opportunity, since I have withdrawn from the private practice of medicine and gone into the work and given my time to preventive medicine, to have a little different view-point than I had before. To me it seems that we are on the eve of a new era in medicine, one in which the physician will become, as we frequently hear, more and more a practitioner of preventive medicine than of purely curative medicine. There must inevitably be a new system evolved by which those who practise preventive medicine shall be paid, and I want to endorse the opinion of Dr. Egdahl that the public is going to be more than half ready to meet the physician. While there may not be the possibility of great incomes —not such large incomes in preventive medicine as there are in the private practise of medicine.—I am satisfied that the average will be better under the new regime than it is at the present time, if there is any truth whatsoever in the statement that the average income of a physician is about $900 a year.

At the present time, as I have seen the situation in Wisconsin in regard to public health, and particularly as seen from the view-point of tuberculosis, there are infinite possibilities all over the state for practitioners who will pay more and more attention to this work.

For example, every township must have a medical health officer. The recommendation of the State Board of Health is that, if possible, a medical man shall be secured for that position. Now if every township had a health officer who was doing all that he might and could do, there would be sufficient work to keep him busy. And I know we have plenty of evidence from such instances as the pay that is given to lawyers in the administration of public affairs, to know that the public would meet the physician half way, and pay dollar for dollar for the value of the services the physician can render in the prevention of diseases. (Applause.)

Dr. C. S. Sheldon: This matter has been gone over very thoroughly, and I think very carefully. As has been said, preventive medicine is the medicine of the future. It is the field in which the medical profession, I believe, will do its greatest work hereafter; and if we are to be benefited to the utmost by this kind of an organization, which is a means to an end, to give us power, by united action, to do a thousand things which we could not do in our individual and separate capacities, we must use that power, so far as we can, along this line of preventing disease, instead of thinking only about cures, as in the past. It seems to me that the County Society might be a most important and forceful agent if it would take up this work in the right spirit and conduct it with zeal and pertinacity. I know that it requires a good deal of time and attention, and perhaps more devotion to something which is not remunerative than many of us would seem willing to give, but in every town of any size, where we have a medical society, there could be a sort of a supervision by the county society in regard to preventive medicine. It could properly instruct the public as to the means of preventing contagious diseases, or along various lines of hygiene and sanitation, or of the

uses and abuses and the injuries of patent medicines, and a thousand things which we can think of and which the public would be glad to know about from the medical standpoint. It seems to me we could be of great benefit, and the public would appreciate such work if it were put in the practical form in which we could give it to them, and it would give us an added advantage in keeping us in touch with the people at large, which, it seems to me, we are not at present. It seems to me that every society ought to have a general meeting at least twice a year to which the public generally is invited, and at which the hygienic conditions of the town could be discussed from the medical standpoint as well as from the standpoint of the laity, including such questions as the water supply, sewage disposal, the matter of ventilation in the home, and the ventilation of our schools, and things which concern the health of our children, and which are dear to the heart of the people, and which they would make use of if they could only intelligently understand them. It seems to me we are responsible to the community for these things, and if we use this power of organized effort which this county society plan seems to give to us, we might be of great service as a medical profession.

Dr. H. W. Abraham, Appleton: Dr. Sheldon just mentioned the fact of bringing this matter more forcibly to the public, through the means of the press, and that reminds me of a thing that has been going on in one of the smaller towns which illustrates very well what effect such a method as that would have upon the public. In a little town of about seventeen or eighteen thousand, there are two daily papers, and the reporters on these papers are very enterprising in the way of getting news, and when they get a little short they go around and interview the physicians of the city on just such subjects as that mentioned here tonight, the prevention of diseases; and it is usually with reference to a disease prevalent at that time, such as preventing a cold, or if there have been a number of cases of typhoid there, to get ideas from the physician as to how to prevent such cases from being more numerous; and the same with diphtheria and other infectious diseases. And every now and then there is an article upon the prevention of tuberculosis, or with reference to methods of ventilation, or the value of fresh air, and things of that nature, and these articles have been put into the reading columns of the paper, and have proved interesting reading matter to the public. The articles are not written by physicians, but the reporter simply goes around and gets the facts and writes them up himself. Reading these articles and hearing them discussed has had considerable influence upon public opinion of that town, and I know in many instances they have been the cause of people living more hygienicly than they had previously lived.

The paper was a very good presentation of the facts, and I think that the subject has become a more familiar one to the general public than it has been in the past, judging from the experience that the physicians have in getting the people to do certain things. For instance, not very many years ago it was very difficult to get a case of tuberculosis to go to a sanitorium in time. They would wait until it was too late to do such a thing. Now we have no difficulty at all in getting them started early, and it is only due, I think, to the carelessness of some of the profession that they are not started earlier. The diagnosis being made, it should be very forcibly impressed upon the patient that he must start at an early date, and we must keep at them all

the time until they do get away. I know that in the last couple of years I have not had any difficulty in sending them away, just as soon as a fairly accurate diagnosis could be made, and in some cases even where you could not find the T. B's, and yet all the other findings were sufficient. In previous years this was impossible, and the patients practically all died. If we would impress that more forcibly upon our patients I think we could save a great many lives which today and in the past have been sacrificed.

Dr. R. H. Buckland, Green Lake: I merely want to mention one way in which we are trying to make practical something in the line of preventive medicine out at Green Lake, and that is through the Anti-Tuberculosis Association, which was formed there last winter. They have recently held a meeting at which they voted to have a petition drawn up, to be signed by as many as possible of the principal men of the town, asking the school board to establish a public sanitary drinking fountain at the school. The steps to be taken are, of course, for the school board to get the estimates on the cost of this, and place them in their specifications at the annual school meeting. We fully expect there will be no opposition to this and that it will be carried out. The present system of having the children use individual drinking cups is said to be very imperfect, and it is not entirely sanitary.

Another thing we have done along the line mentioned by the last speaker is to vote to buy the electrotype sheet that is given out by the Wisconsin Anti-Tuberculosis Association, and have the local paper print an article from a page of that sheet each week as long as they last. Those are some of the small ways in which we are trying to carry out preventive medicine in Green Lake.

Dr. A. Egdahl, (closing:) I have very little to say, except that I agree heartily with what was said by Dr. Abraham in discussing tuberculosis. The fact is that there are a number of cases which are not sent out for treatment early enough, and they hang on and hang on; sometimes the persons themselves are responsible for it, not willingly and intentionally, but it seems to me we could do a great deal in the way of calling attention to the fact that every case should be diagnosed in the early stages.

Another thing that I wanted to mention, and which I should have mentioned before, is that the problem of rural health is just as important as the problem of urban or city health. The problems that confront us at the present time in the country, in regard to the ventilation of buildings, the location of wells, the presence of flies about the premises, are just as important as the conditions we see in some districts of some of the large cities; and this is a side of preventive medicine that has been left almost untouched, the role that preventive medicine could play in the protection of the health of our country population.

## BOOK REVIEWS.

**Infections of the Hand. A Guide to the Surgical Treatment of Acute and Chronic Suppurative Processes in the Fingers, Hand and Forearm.** By ALLEN B. KANAVEL, M. D., Assistant Professor of Surgery. Northwestern University Medical School, Chicago. Octavo, 447 pages, with 133 illustrations. Cloth, $3.75, net. Lea & Febiger, Philadelphia and New York, 1912.

The management of infections of the hand and forearm so that the sufferer will secure the best functional result in the minimal time is the most important subject in all minor surgery. That these results are frequently not obtained is well known to hospital physicians and surgeons who are frequently called upon to care for neglected and improperly treated cases.

The present work is the result of several years study and research devoted to this subject. The author has recorded the results of an immense amount of anatomical research performed in order to found his deductions upon correct anatomical conceptions. This has been done by the study of dissections, frozen sections, injections of the various sheaths and spaces and the use of X-ray pictures. The records of the experimental work are so arranged that the surgeon will find assistance in the diagnosis of the atypical case. The general practitioner who meets only an occasional hand infection will readily find the answer to his questions as to diagnosis and treatment. The author properly insists strongly upon accurate observation and careful diagnosis. Although conservative, he is an earnest advocate of an adequate well-planned incision when surgical interference is indicated. In common with other American surgeons, Dr. Kanavel has found Bier's hypermia of very little use. He has, however, adapted it to his own use by insisting that the constrictor applied to the arm at the time of operation to render it bloodless, be slightly loosened and left in place for eighteen to twenty hours, in order to prevent a too rapid absorption of toxins from the freshly incised surfaces. The use of vaccines, when applied to this class of infections, has been found disappointing. The author depends upon an early, well-planned incision or incisions, complete rest for the part, hot dressings for the first day or two, followed by early, active and passive motion. Following this regime he has been enabled to shorten the period of enforced idleness and has secured good functional results. He also points out the harm that may be done by a too prolonged use of the hot dressing which leads to an excessive infiltration of the part with round cells and produces adhesions interfering with the early use of the part.

The book is written in a clear, concise style, is well illustrated and is singularly free from typographical errors. An excellent index and copious cross references in the text add to the completeness of the work. The type is clear and the book contains many excellent illustrations made from the author's own preparations.

# THE WISCONSIN MEDICAL JOURNAL

MAY, 1912.

## ORIGINAL ARTICLES.

### A FEW SUGGESTIONS TO THE EXAMINING PHYSICIANS IN THE COMMITMENT OF THE INSANE.

BY W. F. LORENZ, M. D.,

MENDOTA, WIS.

The occasional comment by a newly appointed examining physician that he "did not know just what was wanted," or "did not know how to go about it," seems to warrant these few suggestions, nor should these frank avowals be made only by the newly appointed since the information usually received in our commitment papers is inadequate, lacking in detail, and frequently confusing. With the purpose of outlining a method for examination, as well as indicating the character of information most desired at the institutions, these suggestions are made.

While criticism can be offered to the replies usually recorded in the commitment papers, yet the fact deserves mention, that the occurrence of unwarranted commitments is exceedingly rare. One must therefore conclude that the examining physicians have made a careful examination, more careful than the replies would indicate.

Another point which increases the value of detailed notes at the time of the original examination is that the patient's attitude in general may be quite different when in his accustomed environment than when at the institution. The physician's observation under these conditions is of immense value and should become a matter of record; furthermore, relatives and friends may supply valuable data at this time. After the patient has been admitted to the institution, much of the information which could be very easily and accurately obtained at the time of the original examination is secured only after considerable time has elapsed, frequently it is never obtained.

In outlining these suggestions, we will refer to the commitment paper as authorized by the State Board of Control. This commit-

ment paper is arranged in two parts, that which contains the report of the examining physicians and that which comprises the adjudication of insanity and commitment by the court. The questions asked in the physician's part of the commitment are as follows:

1. What is the age of the patient?
2. Where was the patient born?
3. Present place of residence?
4. Married, widowed or single.
5. If children, how many, and the age of the youngest?
6. What has been the occupation of the patient and pecuniary circumstances?
7. When were the first symptoms of the disease first manifested and what were they?
8. Is this the first attack? If not, when did others occur, and what was their duration?
9. What was the cause of this attack?
10. Is the disease increasing or stationary?
11. Are there rational intervals? If so, how often, and what is their duration?
12. Have many changes occurred in the condition of body or mind since the attack?
13. On what subject or in what way is derangement now manifested? *State fully.* Are there any permanent hallucinations or delusions?
14. Has the patient shown any disposition to injure others? Is so, was it from sudden passion or premeditation?
15. Has suicide or homicide ever been attempted? If so, in what way? Is the propensity now active?
16. Has the patient any disposition to destroy clothing or other property?
17. Is there any disposition to filthy habits?
18. What treatment was pursued for the relief of patient? Mention fully particulars and effect.
19. Have you made a physical examination of patient? State fully what is the present physical condition.
20. Has restraint or confinement been employed? Is so, what and how long?
21. Did the patient manifest any peculiarities of temper, habits, disposition or pursuits before the accession of the disease; any predominant passions, religious impressions, etc.?
22. Was the patient ever addicted to the intemperate use of intoxicating drinks, drugs or tobacco, or any improper habits?
23. Has the patient ever had any injury to the head, paralysis, epilepsy or other fits, any sign of tubercular or syphilitic disease, any suppressed eruptions, discharges or sores, or any strong predisposition to hereditary disease?
24. Has the patient been successfully vaccinated?
25. If epileptic, state duration and frequency of paroxysms and duration of disease.

26. Has the patient served in any army or navy of this or any other country?

27. What relatives, including grandparents, and cousins have been insane?

28. Were the parents blood relations?

29. State any other matter supposed to have a bearing on the case.

30. To whom should letters be addressed in case of death, need of clothing, etc.?

31. Has the patient any infections disease?

32. In your opinion, is the patient insane? If such is your opinion *state fully the grounds* upon which it is founded, unless you have so stated in your answer to question 13.

33. Should the person be placed in temporary detention quarters, or be sent to an insane hospital or asylum for treatment?

34. Have you given notice to the patient that application has been made for an examination into his or her mental condition and of the opportunity of a hearing? If not, state fully your reasons for withholding such notice.

35. Does the patient desire a hearing in person?

36. Nationality { Father / Mother } Religious Belief / Education

37. Has patient been an inmate of any institution?

Confined { When? / Where? / Length of time?

38. Have any immediate relatives had tuberculosis, rheumatism, gout, kidney disease, diabetes, cancer, heart disease, rickets, goitre, or any malformations, or been addicted to the intemperate use of intoxicating drinks, drugs or tobacco, or any impropr habits?

39. Is patient a legal resident of this country? If not a resident of this country, where is legal residence?

40. If alien—

Resident of what country?
Date of arrival in U. S.?
Port of landing?
Steamship line?

The purely statistical questions are properly answered in practically every instance so that the suggestions which are to be offered refer almost entirely to Questions 7, 8, 9, 13, 19 and 21. In making suggestions as to the manner of replying to these questions, the writer has in mind the Kraeplin classification or its modification as used in most of the eastern hospitals. The mode of examination as outlined under these suggestions is based upon the methods inaugurated in the New York State Service under Prof. Adolph Meyer. The questions which are inadequately answered will be taken up in their order as they appear in the commitment blank.

Questions 1 to 6 are purely statistical. Question 7 is the first in which carefully recorded facts are of immense value. This question is—"When were the first symptoms of the disease manifested, and

what were they?" The faulty replies are those which fail to convey facts as to duration. The suggestion offered in this instance is—Ask the relative, friend, or acquaintance, who has lived with or near the patient for the greatest length of time just prior to the time of examination, approximately the following: When did you first detect any change in the patient's behaviour, activity, character, general trend of thought, working capacity, etc.? Obtain, if possible, the date of change. Of course in many instances these changes are so gradual that it is difficult to fix the onset, yet when possible, record at least the month and year. The question furthermore asks for the symptoms that were manifested. Unfortunately the space allotted for the reply is not sufficient to detail the symptoms at any length. This criticism of the commitment paper holds good for most of the other questions, excepting those that are alone of statistical value.

Without doubt it is of more importance in the subsequent study of the case to know whether the earliest manifestations were of gradual or of sudden onset. This fact is not asked at any part of the commitment, so the suggestion is offered to include in this reply the character of onset. The space remaining could be devoted to a description of the change that took place. Practically the most important is that of mood. Did the patient become depressed or was he unusually happy? Did he become suspicious of others? Did he change in his attitude towards his immediate associates or his environment? Did his working capacity fail? Did he express peculiar ideas? These and many other questions, which will suggest themselves as the individual is interviewed, would bring out the earliest symptoms. It must be understood that no stereotyped list of questions will answer for all cases.

Question 8. "Is this the first attack? If not, when did the others occur, and what was their duration?" This is partly statistical and easily answered. The suggestion offered in answering this question is—obtain, if possible, the date of any previous attack as well as its duration and its general characteristics. By this is meant whether the mood was altered, whether elation or depression was the dominant mood, whether it was a delirium and whether or not hallucinations were present.

Care must be exercised in the use of the term "attack." We tend to look upon an attack as a fairly definitely circumscribed episode in the patient's life, resulting in a return to approximately normal mental life so that it is of importance to find out whether or not the patient did return to normal, did resume his work and did again

conduct himself in as rational a manner as previous to the onset of his trouble. Care must be exercised to discriminate between an exacerbation occuring during the course of a continuous psychosis and an attack common to the episodal types of insanity so as not to describe the former as an "attack" without stating that the patient did not return to normal.

Question 9. "What was the cause of this attack?" This question is in many instances answered upon insufficient evidence, and unless the relationship of cause and effect is fairly evident, it would be far better to say "don't know," than to record an answer which a relative believes to be the cause, owing to his conception of what the upsetting factors in mental disease should be. By this is meant such statements as "worry," "business troubles," "reverses," "homesickness" etc. Without more detailed information, these ascribed causes are of no value. Another very popular cause, not in any way justified, is "head injury." This is met with frequently in commitments, yet from the character of the psychosis, its course and termination, the relationship of this head injury to the mental disease is exceedingly vague, in fact, only serves to confuse. In all but a very few cases upon subsequent questioning of the informant we find that this so-called injury was nothing more than the bumps which very few of us escape during our lives. The suggestion offered when head injury is given as the cause is—that efforts be made to find out the extent of injury, the severity of the blow, the existence of unconsciousness or sequellae and especially the approximate date when the accident occurred. These facts can be supplied at this point or in reply to Question 23.

Frequently this question is answered by the laconic "Alcohol." Here again further detail is asked for, which can be answered in reply to Question 22, or may appear at this part of the examination. The type of alcoholic beverage used and the average amount consumed in a day for a specified length of time should be made a matter of record. We, in obtaining this information from the patient, are confronted with the well known minimizing tendencies of this class in detailing their excesses. The examining physicians can obtain this data from relatives or friends or in many instances from personal knowledge of the patient's tendencies, consequently their replies are much more reliable.

Question 11. "Are there rational intervals? If so, how often and what is their duration?" This question applies more, it seems, to conditions of delirium than to the slowly progressive psychoses. The term "rational" is too embracing and without doubt causes the

examiner to hesitate somewhat before answering. It is presumed that a slowly progressive or often stationary mental disease is incompatible with rational behaviour, thought, and speech, yet a patient may and frequently is quite rational in his conduct and still very irrational in his mentation. On the other hand in conditions of delirium or the lesser confused states, hours or even days of perfectly rational conduct and thought processes occur. In such cases it would be quite proper to speak of rational intervals. By taking this view of Question 11, it will be seen that the occurrence of distinct attacks common to the episodal type of psychoses is not considered in replying to this question. It is assumed that this information was given in reply to Question 8.

Other conditions which may have rational intervals are epilepsy. Of course, in this type of trouble the rational interval is usually of much longer duration than the post-epileptic stupor or even amnesic periods, when these are present, so that it would seem more proper to refer to the seizure itself as the interval in the patient's life, rather than the comparatively longer period of mental clearness. Excepting conditions of delirium in which lucid moments sometimes occur and vividly contrast themselves from the dominant condition, it is suggested that this question be answered "No rational intervals," unless all signs of mental aberration cease to be present for a specified length of time. It may be added that such conditions are rarely found outside of the toxic or exhaustive types of insanity.

Question 12. "Have any changes occurred in the condition of body or mind since the attack?" This would seem to apply when there has been a pronounced failure from a previous state of health, whether or not considerable loss of body-weight has occurred, whether or not rapid mental failure, general in its nature, has occurred.

Question 13 is by far the most important and should necessarily show the results of the mental examination made. It is as follows: "On what subjects or in what way is derangement now manifested? STATE FULLY. Are there any permanent hallucinations or delusions?" The large type "STATE FULLY" seems rather ludicrous, when we consider the space allotted for the reply. It has without doubt impressed every examining physician that he could not describe the mental condition at any length, because of this restricted space, so that frequently a few stereotyped expressions occur, as "delusions," "hallucinations," "mental failure," etc. These replies are not adequate. On the other hand, sufficient space for a detailed answer is not given, consequently a middle course must be adopted. This

means the employment of a number of descriptive terms, which are not ambiguous and whose definition offers no room for doubt as to the intention of the examiner.

The procedure which seems most convenient and which will elicit facts in an order logically leading to a conclusion can be abstracted from the extensive methods of examination introduced in New York State by Meyer. In making the following suggestions, the writer faithfully follows this method, only taking therefrom such essentials as would tend to make the examination too lengthy for practical purposes. The end in view is quite different. The complete original method leads to a diagnosis. The method of examination suggested in this paper is only for the purpose of commitment.

This method is divided into the following heads: Attitude and Manner, General Mental Attitude, Orientation and Mental Grasp, Insight and Judgment. Practically each part should appear in any examination. In the commitment paper, certain parts can be curtailed, while others should receive prominence.

The method of examination suggested would be approximately the following: First note the general demeanor of the patient, the manner in which he receives the examiner, does he appear suspicious or is he indifferent? If strong affective states are present, proper description is not difficult and should be made. Is he unduly happy or depressed? Next note his motor state. Is he overactive or sluggish in his movements? This phase of the examination merges into and is part of the following as any change in the patient's general demeanor resulting from subsequent conversation should be included with the few words finally intended to describe his attitude and manner.

The stream of thought is now studied. Does the patient immediately launch into conversation? Is there a press of speech, or on the other hand, is there failure of response to questions? If possible, have the patient give a spontaneous account of his trouble and then note whether his trend of thought is coherent, whether it leads to a goal idea or is rambling and desultory, whether his utterances are flighty with a tendency to rhyme, whether his ideation is affected by the trivial occurrences within his range of sight and hearing; whether his replies to questions asked him are irrelevant or inadequate; whether the patient is attentive or inattentive and whether the latter was due to distractibility of attention or indifference. If disorder of the stream of thought is present, a few descriptive terms will suffice, such as, "incoherence of thought," "flight of ideas," "distractibility,"

"irrelevant replies to questions," "loquacity," "inadequate response," "delayed replies," "mutism," etc.

Under the next heading, the patient's subjective mood, delusions and hallucinations are investigated. He is asked, "How do you feel?" or better, if he appears sad, ask him "Are you sad?" On the other hand, if he seems happy, ask him directly, "You are happy?" If other emotional states are apparent he can be asked concerning them. Here we note whether the patient's mood is in accord with his mental content. Striking contrasts are exceedingly significant and should become a matter of record. Thus, if a patient tells of persecutions, attempts made to injure him, and yet expresses no anger, shows no deep concern, possibly smiles as he relates his account of persecutions, we refer to this inadequacy as a loss of affectivity or deterioration in the emotional field. Upon the other hand, undue emotional display upon insufficient grounds should receive mention.

Next comes some record of the patient's false ideas, if any exist. Taken in their order, delusions of persecution are probably most frequent. A cue as to the patient's mental content will be obtained from the relatives. In some instances considerable tact is necessary in obtaining a patient's confidence and consequent avowal of his delusional trend. In other cases these ideas are freely expressed. In either event, mention should be made as to the manner in which the patient behaved in this respect; if he is reticent and evasive, or if he freely expressed his ideas.

As to the delusions themselves, some mention should be made as to the subject upon which he has become deranged, as well as the fixity of the ideas and whether or not he has systematized his persecutions. By systematized delusions, we mean a condition in which the delusional concepts are grouped and one contention supports another until a fairly logical conclusion is reached. As a rule, this type of delusion is of a persecutory nature. It has been referred to as "reasoning insanity." When the patient persistently adheres to the same delusional concept for a considerable period of time and the ideas continue unchanged, we refer to this as a fixed delusion.

Concepts which occur quite frequently and are fairly typical of a certain class of psychoses are known as ideas of "mental influence." As a rule the patients holding these ideas are not reticent to speak of them. To instance a number of ideas of this class,—that in which the patient believes his mind and consequently his behaviour dependent upon the influence exerted by a "more powerful mind" is fairly common. It seems to be a very simple psychological side-step

in which the patient prefers holding some outside influence accountable for acts, usually of a sexual nature, which his own experience and teaching tell him are wrong.

This mental influence is exerted in various ways again somewhat dependent upon the patient's previous mental level. Many illiterate patients of this class refer to this influence as in the nature of "haunting." With the advent of mesmerism, this class pounced upon this phenomenon probably because in itself the power was a mysterious one to them and many claimed they were mesmerized or hypnotized. Mental telepathy and even more recently "wireless" has been brought forth by these patients as an explanation for the manner in which outside influences are exerted upon their minds. Almost invariably this type of delusion is associated with peculiar sexual ideas, that is, these influences are brought to bear by members of the opposite sex or the influence is directed toward the sexual instinct of the patient.

There is another type of delusion fairly restricted to a well-defined group, the chronic alcoholic. These ideas are generally referred to as ideas of infidelity. They are fairly common, and practically always take the direction of adulterous behaviour on the part of the wife or husband. An explanation for this frequent attitude of the chronic alcoholic towards his nearest relative has been offered. The waning sexual desire, resulting from the long continued abuse of alcohol is not recognized as such, but is attributed to indifference on the part of the wife or husband. This indifference, the patient assumes, is a consequence of adulterous conduct.

Accompanying a large group of depressed cases, we have ideas of a depressive nature. The individual's mind no longer functionates as formerly, his various bodily organs are out of order, the future is teeming with unhappiness, his own past sins are constantly brought to mind, etc., etc. Suicidal attempts are common to this type of mental disorder. When these attempts have been made it is suggested that a detailed account of the occurrence be obtained, in order that one may decide whether or not the attempt in itself was a serious one.

Another fairly frequent complex, typical of the paretic and when present, as a rule spontaneously offered, is expansiveness. These expansive tendencies may take any direction, he may have the wealth of Croesus, the mental endowment of a savant, the strength of Hercules. He may identify himself with the Deity, a king or president. These absurdly expansive ideas should be recorded. Occasionally this sense of well being is not so evident. This seems true early

in the course of general paralysis and in such a case the change from the previous and usual disposition must be recognized. In such a case the expansive tendency may take the direction of a mild euphoria, a more venturesome tendency in business, carelessness and indifference of the welfare of loved ones, etc.

Hallucinations, when present, should be recorded with a description of their general character and the special sense involved. In the auditory field the hallucination may be an indistinct buzzing, humming, rumbling or ringing. It may be an indistinct voice, not conveying definite words, or it may be a clear, distinct voice carrying words, names or lengthy messages. The voice is variously described. It may be a single voice or many. It may be male or female, child or adult. It may come from "within the mind" or from great distances. When the latter type is present, the patient frequently resorts to the telephone, telegraph, wireless, etc., to explain the manner in which the voice reaches him from a distance. Visual hallucinations are less common and usually found in the toxic or exhaustive type of mental trouble. Hallucinations of taste and smell are fairly common and frequently associated with ideas of poisoning, either by tampered food or noxious fumes. Somatic hallucinations, described by the patient as peculiar sensations variously situated about the body, when present should be recorded as such. Illusions of any of the above senses are occasionally described.

After sufficient data coming under the head of Mental Attitude have been obtained, we would investigate the patient's memory field for both the recent and remote in conjunction with his retentive powers and orientation. Orientation in its psychiatrical sense means the awareness of person, time and place. The unconscious individual is entirely disoriented. Lesser degrees of unconsciousness, those which have been referred to as "clouding of the consciousness," may show an orientation for person, that is, the individual is aware of his own identity and yet he may not recognize his surroundings, and have no concept as to time. In such a case he would be disoriented for both time and place. It is quite frequent to have patients disoriented for time and still remain oriented for person and place. In fact this is commonly seen in the senile cases. In eliciting orientation as to time, we ask the patient the approximate hour of the day, the day of the week, the month and the year.

To estimate the patient's retentive powers, simple tests can be given early during the interview and the patient be asked to recite these tests after a period of one-half or one hour. A few numbers,

names and the time of day can be given as a test. Failure to respond with the test may be due to failure of attention at the time the test was applied or it may be due to inability in recalling the same.

His memory for the remote is investigated by asking him details of his earlier life, his age at various epochs with dates, etc. Frequently gross discrepancies are elicited. The immediate past is asked for as some mental disorders will show an amnesia or haziness for the immediate past with good recollection for the remote. This is a common and nearly diagnostic finding in the senile type of mental disorder.

The patient's general information can be investigated if this field seems impaired. Naturally, before arriving at a conclusion concerning the individual's lack of information, we must know what his educational advantages have been. A school graduate should at least know the names of ten or twelve Presidents, would give important historical events with dates, etc., should name the five largest cities and have a fair knowledge of geography. Current events, topics of general interest such as political conditions, etc., would indicate normal interest. This field is wide and can be covered in any way the examiner sees fit. Counting and calculation may be employed, likewise reading and writing. The latter especially may bring out certain characteristic defects.

In some cases none of the previously mentioned fields can be investigated owing to the existence of excitement, delirium or stuporous states. In such cases a description of the excitement, delirium or stupor must suffice. When very excited or delirious it is frequently possible to note whether hallucinations seem to be present. From the patient's utterances or from his behaviour, it is sometimes apparent that he is reacting to a hallucinosis. It is especially worthy to note whether the patient seems fearful and apprehensive during his excitement. Stuporous states should be described as to the existence of muscular rigidity or catalepsy, the ability of being aroused, of securing the attention or even partial co-operation. A very simple method is to offer the hand for a greeting and note whether the patient shows any indication of recognition.

The writer realizes how fragmentary these suggestions for points of investigation in reply to Question 13 have been made. The main point which the writer wishes to emphasize in all these suggestions is that essentials, no matter what their nature, be recorded in reply to these questions. Thus given a reply of this nature—"Patient is quiet, composed, suspicious, resentful, haughty, evasive and reticent, believes

that property and inheritance are wrongfully withheld—ideas are fixed and systematized—clearly oriented—good memory and grasp—no insight." With a summary such as the above in conjunction with a definite statement as to the duration and progress made in reply to Question 7, both the original examiner and the physician making the subsequent examination at the institution have a fair idea as to the type of mental trouble from which the patient is suffering.

Take an answer such as this—"Patient is excitable—great muscular activity—inattentive owing to distractibility—very loquacious and flighty—mood elevated—clearly oriented—memory good." This reply with a statement as to the duration of the attack, the existence very probably of previous attacks with their duration, etc., answered under previous questions would be very significant of the Manic Depressive type of mental disorder.

A reply such as the following: "Patient is listless, indifferent—dull—inattentive—rambling and desultory—replies irrelevant and inadequate—loss of interest—ideas of influence and mind reading—hears voices—receives messages by wireless—is oriented—has fair memory and grasp—no insight." This with a statement as to the duration and character of the onset, would be very significant of a deteriorating psychosis of the Dementia Praecox type.

An answer such as this, one which might frequently be made,—"Patient is delirious—no co-operation—appears very apprehensive—talks incoherently—active auditory and visual hallucinations—hears shots fired—sees strange animals—speaks of attempts made to kill him—is disoriented and confused." This summary would fit in very well with the acute Alcoholic Deliria.

Questions 14 to 18 inclusive leave no room for doubt as to what is desired. Question 19. "Have you made a physical examination of the patient? State fully what is the present physical condition," is rarely answered in accord with the examination made. Several patients have been admitted to the institution suffering from serious physical conditions—a case of lobar pneumonia involving almost the entire lung, a case of fracture of the clavicle, several cases of advanced tuberculosis, as well as cases of cardiac disease have been admitted without note made as to the existence of these lesions. It is not supposed that these conditions went by unrecognized, although no mention was made in answer to the question. As a routine, the temperature, respiration and pulse should be taken and recorded. The circulatory system and the respiratory apparatus should be examined and the findings recorded. A few observations from a neurological

standpoint should be made. The pupillary reflexes as well as the deep reflexes should be examined. The character of the gait, the presence of Romberg should receive attention. Disorders of speech, when present, should be recorded. Special test phrases may be called into use to elicit a speech defect. Any special lesions such as deformities, hernias, palsies, anesthesias, severe localized pains, etc., etc., should be included in the reply to this question.

Question 20. "Has restraint or confinement been employed? If so, what and how long?" is very definite. From the character of the replies obtained to Question 21. "Did the patient manifest any peculiarities of temper, habits, disposition or pursuits before the accession of the disease; any predominant passions, religious impressions, etc?"—it can be assumed that the significance of this question is not generally understood. During the last few years great stress has been laid upon the so-called make-up of a patient. Hoch of New York and Meyer of Johns Hopkins have noted the presence of what they term "a shut-in personality." They believe it to be the type of individual in whom "complex disturbances," mal-adjustments of the sexual instinct, etc., lead ultimately to the psychical breakdown seen in Dementia Praecox. It is therefore of vast importance to question the relatives closely in order to ascertain the general make-up of the individual previous to his mental affliction. With this in view the relatives are asked for any peculiarities noted during early childhood, the disposition of the child, the existence of vicious traits, fits of temper, etc., whether walking or talking were acquired late. The individual's life at school is investigated. Was he an average scholar or was he slow or exceptionally bright? What were his social tendencies? Did he mix freely with his companions? Did he enjoy sports and the other diversions of those with whom he associated, or did he seclude himself from others? Was he shy and retiring? Later in life, when occupation was taken up, did he progress? Was he ambitious? Was his ambition in accord with his capabilities and his efforts? Much can be learned by asking the parents to compare the patient with some other member of the family of the same generation. In other words, was he different from his sisters and brothers and if so, in what way? Inquiries along these lines will give information as to the type under examination and should be fully recorded in reply to Question 21.

Question 22. "Was the patient ever addicted to the intemperate use of intoxicating drinks, drugs or tobacco, or any improper habits?" is very concise. The only suggestion offered has been referred to

when Question 9 was being considered, that is, details are important. The average amount, the character of intoxicant, as well as the length of time the addiction has existed should be mentioned.

The remaining questions of our commitment papers are, as a rule, clearly answered. If detailed replies can be obtained to those indicated, the value of the subsequent examination at the institution is considerably enhanced. Efforts along these lines by those making the original examination will be greatly appreciated. It might be added that the facts recorded in a commitment paper frequently decide a diagnosis.

---

## TREATMENT OF PUERPERAL INFECTIONS.*

BY THOMAS J. WATKINS, M. D.,

CHICAGO.

Much of the treatment in general use in puerperal infections is bad. This is due to the fact that the clinician has not kept pace with the advance that has been made in the study of infections and immunity. When the etiology of puerperal infections became known the disease was considered a local disease. Recovery was supposed to result from the use of local remedies and localized reactions. The treatment that developed consequently consisted chiefly in the use of local remedies. Much of this treatment which was based upon a pathology that was largely false continues to be used by many clinicians.

Puerperal infection is essentially a systemic disease in much the same sense that influenza, diphtheria, pneumonia, typhoid fever, etc. are general diseases. All of them usually, but not always, have localized manifestations. Many of the puerperal infection cases have no decomposed tissue or inflammatory exudates in the pelvis. The severity of the disease has little or no relation to pathologic changes in the pelvis. The severity of the disease is determined mostly by the virulence of the invading bacteria and partially by the amount of body resistance. The diseases mentioned are caused by specific bacteria; puerperal infection is caused by a variety of bacteria. Infectious diseases have however much in common, irrespective of the kind of bacteria present. In fact, the pathology and clinical manifestations vary as much with the same bacteria as with different

---

*Read before the Medical Society of Milwaukee County, April 22, 1912.

bacteria. For example, as much variety may obtain in various influenza infections as obtains between a streptococcic or staphylococcic infection. The same is true of nearly all infectious diseases. All of the bacterial diseases tend to follow a definite course as regards periods of incubation and fever. The presence or absence of inflammatory exudates, which are largely accidental, depend chiefly upon the amount of localized irritation which the resultant toxines produce. The length of the febrile period depends upon the time required to develop a general immunity or according to Vaughan to burn the proteid bodies (the bacteria).

All of the treatment with serums and vaccines is based upon the fact that infections are essentially systemic diseases and that recovery results chiefly from systemic reaction in the general tissues of the body. The excellent results obtained in the treatment of furuncles and acne demonstrate that even these apparently superficial and localized diseases are in reality systemic diseases as they are best treated by systemic remedies that produce systemic reactions. The use of diphtheritic serum has demonstrated the slight value of local remedies in that disease. The same is probably true of all bacterial infections. Experience as regards excision or incision of inflammatory pelvic exudates in puerperal infections is evidence that the disease is essentially systemic, as the duration of the acute period of the disease averages about three weeks irrespective of surgical intervention.

What of the cases where the removal or expulsion of decomposed tissue from the uterus is soon followed by recovery? These are cases of infection mostly of putrefactive bacteria—bacteria that have very low virulence and that are not of much danger as regards life or health. Whether these do not enter in great numbers into the general circulation or whether an immunity is very quickly developed has not been determined.

*Treatment*: As the disease is systemic the logical treatment must be essentially systemic. The treatment to be rational must consist in the use of measures to directly limit the growth, to destroy the invading bacteria, or to hasten development of a general immunity. As yet no means of limiting the growth of the bacteria is known except the putrefactive variety. There is no evidence to present that the removal of putrefactive tissue has any influence upon the growth of such bacteria as streptococci and staphylococci. The fact that the offensive cases seldom die if not too vigorously treated is some evidence that the putrefactive bacteria may limit the destructive action

of other bacteria, as many of the offensive cases have a mixed streptococcic or staphylococcic infection. This is however an open question. The use of serums and vaccines in the treatment of puerperal infection is in the experimental period and has not advanced far enough to be of sufficient interest to discuss at this time.

This leaves only the remedies that assist in the development of a general immunity—that sustain the body resistance. Chief among these are nutritious diet, general hygiene, sleep and the free use of liquids to dilute and promote elimination of toxines. The treatment is much the same as for tuberculosis, which is based upon increasing the body resistance and thus hastening the development of general immunizing substances.

*Invasion of the uterine cavity*: This should not be done in infected cases. In case of hemorrhage the vagina, cervix and preferably the uterus should be packed with gauze to produce spontaneous expulsion of the retained tissue. The packing is especially valuable in cases of abortion with poor dilatation of the cervix.

Decomposed tissues in the uterus will soon be expelled spontaneously. Efforts to remove it, especially if attended by anesthesia and much traumatism, are attended by much danger. The chief danger consists in dislodging septic thrombi from the uterine sinuses, and thus producing embolic infections. Most of the cases which we see of inflammatory exudates in puerperal infections have been curetted and have quite probably resulted from dislodging these septic thrombi.

*Douches*: The use of vaginal or intra-uterine douches is a reflection upon one's education and intelligence.

*Drainage*: In offensive cases the head of the bed is raised as high as possible without distressing the patient. If the perineum is infected moist boric-acid dressings are kept over the vulva.

*Inflammatory pelvic exudates*: These are usually not excised or incised during the acute period of the disease, unless a large fluctuating abscess develops. Operations are not often indicated for pelvic inflammatory exudates in the acute not puerperal cases. There is less indication and much more objection to operations in the puerperal than in the non-puerperal cases during the acute period on account of the difference in the pathology and body resistance in the two instances.

*Hysterectomy*: A study of the literature and the present status of our knowledge of infection and immunity would indicate that

hysterectomy in puerperal infection is interesting only as a matter of history.

*Abdominal section for thrombo-phlebitis and general peritonitis*: The valuable work of Williams and Trendelenburg in cases of thrombo-phebitis is interesting and suggestive. We have not done this operation and have had but one case of thrombo-phebitis where excision of the affected veins might have been of value. The operation would seldom if ever seem to be consistent with the modern interpretation of infection and immunity.

Abdominal section for suppurative peritonitis may have a limited field. The cases of this kind done early in our practice that were treated by abdominal section died. The operation to be of value would have to be done early in the infection. Most of these cases could probably be as well treated by puncture and drainage through the posterior vaginal fornix as by abdominal section. We have had but one patient where puncture through the posterior vaginal fornix seems to have been of value.

*Results*: We have treated 88 patients during the last seven years, mostly in accord with the methods given above. The cases were the severe ones that are usually sent to a hospital. Many of them had been curetted, given intra-uterine and vaginal douches, had developed pelvic exudates, became dangerously ill and then sent to the hospital. Eighty recovered; eight died.

Forty-eight received supportive treatment only. Supportive treatment was the chief remedy in the other cases. The uterus and vagina were packed with gauze in fourteen cases to promote spontaneous expulsion of retained tissue. Abdominal section was made in six cases. One was for suppurative peritonitis—patient died. Three were done for inflammatory exudates. They were found inoperable, the exudates finally absorbed and complete recoveries followed. These were among the early cases. One was done for a supposed twisted ovarian cyst, following labor. An inoperable inflammatory exudate was found. The mass entirely disappeared by absorption. One was for a supposed infected tubal pregnancy. A suppurative streptococcic exudate, involving an ovary, tube and top of broad ligament was excised. A stormy convalescence resulted. The section apparently increased very much the morbidity. Pelvic exudates were found in 42 cases. Only two of the last 65 cases were incised. One had a large gluteal abscess. All of them recovered and the exudate had in nearly every case entirely disappeared when they were discharged from the hospital. The rapidity of absorption after disappearance of the fever has been remarkable. A study of

the records has surprised us in that the average stay in the hospital has averaged only about three weeks.

*Fatal cases*: Suppurative peritonitis (hopeless cases), 6; multiple embolic streptococcic abscesses, 1; pelvic abscesses, 1. This was among the earlier cases. Vaginal incision and drainage was made. General peritonitis finally developed and death resulted. We believe this patient would have recovered had operation been delayed until some general immunity had developed. There have been but two deaths in the last fifty cases.

---

## PLACENTA PREVIA.*

BY G. A. CARHART M. D.,

MILWAUKEE.

The pathological conditions met with in placenta previa are the most diffieult to deal with of all the obstetrical complications. The three dangers, namely, hemorrhage, sepsis and fetal mortality constitute a triad of serious symptoms such as will frequently tax the judgment and skill of the most experienced obstetricians.

A perusal of the subject in many of the recent text-books leaves one with a decidedly hazy idea of the immediate means essential to cope with the grave situation which confronts one.

The medical literature of recent years teems with case reports, all of which remind us that the mortality to both mother and child is still too high. For these reasons I have deemed it proper to bring before you this subject with its great diversity of opinion regarding the treatment.

*Etiology.* This is a condition met with primarily in multipara, Warren (Lancet, 1906), in reporting 100 cases found that only 16 per cent were primiparae. It is generally conceded that a chronic subinvolution or endometritis or a general debilitated state are predisposing factors in this condition.

*Pathology.* Founded on the pathological conditions present, there are two types, namely:

1. Complete placenta previa. The placenta being implanted directly over the cervix, thereby weakening the cervical wall and greatly increasing the dangers from hemorrhage.

2. Partial placenta previa. The greater part implanted in the corpus of the uterus.

---

*Read before the Medical Society of Milwaukee County, March 8, 1912.

Luckily for the mother and child the latter is two and a half times more common than the complete form. If any portion of the placenta is situated within two and one-half to three inches of the nondilated position of the internal os it will be within the stretching zone of the uterus and thus likely to cause hemorrhage.

*Symptoms and Diagnosis.* The characteristic symptom of sudden and unexpected bleeding, without adequate cause, during the latter part of pregnancy is enough to excite one's suspicion of imminent danger. As distinguished from accidental hemorrhage it is not accompanied by any uterine pain and if left undisturbed will always recur. The location of the placental brim is uncertain and cannot be relied upon. Frequently the placenta can be felt through the partially dilated cervix.

*Frequency and Mortality.* With the increasing number of reports we find that placenta previa is a much more frequent condition than was previously supposed. Recent statistics place it as one case in 300 labors and in obstetrical clinics as high as one case in 160 labors (McDonald). McDonald in a recent communication has collected, with the aid of Holmes' figures, 8,625 cases treated during the aseptic period of obstetrics. The maternal mortality in the complete form is about 15.5 per cent and in the incomplete form 4.8 per cent. The statistics regarding the mortality of the infant are exceedingly unsatisfactory inasmuch as the viability of the child, the date of death, etc., have been differently reported upon by different observers. Fully half of all infants die under the most approved treatment.

The following case, recently delivered will serve as a basis for the discussion of the treatment: Mrs. M., age 38, married; one child, 18 months old. This labor was exceedingly long and difficult, the delivery was instrumental, the child being in the persistent occipito-posterior position and resisting all efforts at rectification. Both the cervix and perineum were badly lacerated; the perineal stitches all sloughed at the time. Last menstruation occurred the last week in April. On December 24th (or when she was seven and one-half to eight months pregnant), while the patient was at home she was suddenly seized with a severe hemorrhage. As near as could be estimated she lost between a pint and quart of blood. She was immediately transferred to a hospital and put to bed and kept under the influence of morphine. An examination at this time showed about one finger dilatation and the placenta could be distinctly felt. Fetal heart was loud and distinct. Two days later, while in bed and under the influence of morphine, a second hemorrhage occurred. This was not

severe, but delivery was then advised as giving the best chance to both mother and child. The delivery was done by the use of metreuryse or hydrostatic dilators. The first dilators used were those devised by Barnes, and the three sizes were successively introduced. The introduction of the bags started the labor pains and when the third bag was expelled there was about two fingers dilatation. The membranes were ruptured at this stage and an effort made to introduce the second size Champetier de Ribes bag within the ovum. A slight amount of manual dilatation was necessary and quite a hemorrhage ensued, but with the introduction of this bag it was effectually controlled. This bag remained in place about one and a half hours, during which time labor pains were regular and strong. Some traction was used on the bag and at its expulsion the cervix was well dilated. An attempt was then made to apply the forceps, but as it was rather difficult and the hemorrhage quite alarming a Braxton-Hicks version was done, which again effectually controlled the hemorrhage. Ether anesthesia had been used since the expulsion of the Champetier bag. The cord was still pulsating, so the child was immediately delivered. Aside from being somewhat asphyxiated the child was apparently undamaged. Artificial respiration was successful in restoring respirations and the child did well for twelve hours, when it was seized with convulsions and died two hours later. The mother made an uneventful recovery, leaving the hospital on the 10th day.

In considering the treatment of this condition the main factors are hemorrhage and fetal mortality. Before the introduction of metreuryse the favorite way of controlling the hemorrhage was by packing the cervix with gauze. To be effective the gauze must be placed well within the cervix and against the placenta and very tightly packed. This is usually an exceedingly difficult thing to do under existing circumstances. It is frequently ineffectual in controlling hemorrhage, even in skilled hands, has little or no effect in dilating the cervix and predisposes and invites infection. It should be regarded as an emergency operation, and used only until some other means can be employed. If ultimate delivery is attempted by this method the maternal mortality runs over 25 per cent, and with almost certain death to the child.

I believe the most satisfactory way of dealing with these cases is by the use of the colpeurynter or elastic bag. Of these the most common are the Barnes and Champetier de Riebs. Unless one is doing a great deal of obstetrical work, bags will spoil between cases. The rubber oxidizes and as soon as any pressure is put on them they

break and one is then thrown back on some other and less satisfactory form of treatment. I have found that the best way to keep these bags is to place them in sterilized glycerine. The Barnes bags serve the best purpose in the beginning when the cervix is small. By the time the largest size has been expelled, the small Champetier bag can be introduced. The difficulty in the use of the Barnes bag is the inability to keep it in position. It has a decided tendency to slip up into the uterus or out into the vagina. If hemorrhage occurs each time with each slipping it becomes a serious consideration. To avoid this slipping, Dr. Barton C. Hirst, of Philadelphia, has recently invented a new bag. The primary difference between his and the Barnes bag is that his bag has what might be termed wider shoulders, and thus has a greater tendency to stay in place. While I have not tried them I believe they are an improvement. When the cervix is partially dilated the Champetier bag seems the best means of completing the dilatation and controlling the hemorrhage, whether the placenta is centrally located or not. The Barnes bag may be used where the cervix is very small, but it is desirable to change as soon as possible to the Champetier bag, which is larger and will complete the full dilatation. The latter bag should always be introduced within the ovum if possible. In the complete form of placenta previa the bags should be pushed around one edge of the placenta and not through the center. At the completion of dilatation immediate delivery should be done by the Braxton-Hicks method. If conditions are favorable, time should be taken for this so as to do as little damage as possible to mother and child.

The bimanual dilatation or so-called "accouchment force" will take on an average a full half-hour, during which time there is frightful hemorrhage. Compared to the results with the colpeurynter the mortality is very unfavorable. The various forms of Cesarean Section have done nothing toward solving the problem of mortality. The patient is usually weakened by hemorrhage and often contaminated by examinations and does not respond well to the shock of Cesarean Section. The only exception being in primiparae, when the parts are small and hard to get at. (Schauta.)

*Post Partum Hemorrhage and Infection.* The location of the placenta in the lower uterine segment has a tendency to reduce its elasticity and contractile power, therefore post partum hemorrhage is more likely to occur than under normal conditions. The hypodermic use of ergot may be necessary, and if the patient cannot be carefully watched, the uterus may be packed for twenty-four hours.

Sepsis is one of the late dangers. Traumatism, the debilitated condition of the patient and excessive manipulation are all contributing factors. Rubber gloves should invariably be worn and trauma and examinations reduced to a minimum.

*Conclusions.* The chief indication is to empty the uterus as speedily as is consistent with safety to the mother. As Grundriss says: Many a physician has "lost the mother because he would quickly deliver the dying child."

The more general use of the hydrostatic dilators seems at present the best method of reducing maternal mortality, and that which gives least maternal mortality likewise saves the greatest proportion of children.

---

# THE SURGICAL MANAGEMENT OF DEVELOPMENTAL DEFECTS IN THE NEW BORN.*

BY HARRY GREENBERG, M. D.,

MILWAUKEE.

To be born right is the first requisite to a right life. Born handicapped with a developmental defect places the child at a great disadvantage in its struggle for existence in a world wherein the law of the survival of the fittest reigns supreme.

Our duty as physicians to children born with defects is plain; we must begin where Nature has left off, and with knife and saw, needle and thread, finish up Nature's incomplete work.

The cause or causes of developmental errors and the means for their prevention are not within the scope of this paper. At best it is beyond our control, and we will concern ourselves only with the management of these defects when present.

## Hare Lip and Cleft Palate.

Hare lip and cleft palate, singly or combined, slight or extensive, is by far the most common developmental error of childhood. It is supposed to be produced by an incomplete fusion of the central process with one or both of the lateral processes from which the upper half of the face is developed. Aside from the disfigurement it also interferes with proper nutrition and offers an embarrassment to the proper articulation of speech. Fortunately for the children so affected, this defect lends itself readily to surgical management and offers good

---

*Read before the Medical Society of Milwaukee County, Feb. 9, 1912.

surgical results. The only thing to be emphasized at this time, in connection with the management of this defect, is the necessity of having it attended to as early in life as possible; in fact as soon after birth as the child's condition will permit. This point is probably not sufficiently recognized by a large portion of medical practitioners, and children suffering from hare lip and cleft palate are but too often brought to the surgeon when quite advanced in years, when they are already grappling badly with severe impediments of speech, which take months or even years of expert training to overcome.

The only thing to be remembered in connection with the operation proper in these conditions is that the deformity must be overcorrected in order to be sufficiently corrected. One must expect in all these cases to lose a certain amount after the healing has taken place, and provision must be made for the inevitable loss. There should be no tension on the flaps in the operation for hare lip, even though it be necessary to loosen the cheek to a point very near the eye in order to secure a loose flap. The same holds true in cleft palate; the flaps should be loosened on each side so thoroughly that they will come together without any tension. The success of this operation really depends upon the thoroughness with which the flaps are loosened. If the surgeon appreciates this fact he has grasped the most important principle in this operation.

### Tongue Tie.

This simple defect, unless recognized and corrected early, may be the means of great embarrassment to the child. It is caused by a shortening of the frenum of the tongue. A simple division of that membrane with a dull pointed scissors will bring about a cure.

### Hernia.

A child born with a defective abdominal wall, permitting hernial protrusions of visceral structures, is greatly handicapped, and is seriously deserving of our attention. It is estimated that one-seventh of all hernias are seen in children during the first year of life, a rather significantly large number, considering that one in every twenty or thirty persons is said to have a hernia.

### Umbilical Hernia.

The most common type of hernia in early child life, as well as the most easily managed, is the umbilical hernia. It is caused by the existence of a congenital sac, or an enlarged umbilical ring, or both.

In the normal infant the umbilical opening in the abdomen is just large enough to allow the passage of the umbilical cord and vessels. After the cord has separated there remains a small area of granulations which quickly heals. If this opening should be abnormally large the thin tissue gradually yields to the intra-abdominal pressure and a hernia results. This type of hernia need practically never to come for operation. Any mechanical means that will for a time keep such a hernia from protruding, plus proper regulation of intra-abdominal pressure, will produce a cure. The simplest mechanical appliance and the one that has served me best in these conditions, is a strip of zinc oxide adhesive plaster, about two inches in width, placed so as to entirely encircle the abdomen on a level with the umbilicus.

### Inguinal Hernia.

The next common type of hernia in early child life, is the protrusion through the inguinal canal, or inguinal hernia. This type of hernia, it is now pretty conclusively established, is always due to the existence of a funicular, or prenatal sac. Given a preformed sac or an open funicular process of peritoneum there is always enough omentum present ready to be forced into the sac, in the presence of the particular existing cause, which sufficiently increases the intra-abdominal pressure. Any means that will permanently obliterate or eradicate this prenatal sac, will cure this form of hernia. This is accomplished either by mechanical appliances, such as the application of various trusses, plus the regulation of the intra-abdominal pressure; or by the open excision of the sac. A large percentage of cures is obtained by treatment with mechanical appliances, especially in hospitals, where everything can be properly supervised and managed. In private practice this mode of treatment does not give the best results.

My own experience with this manner of treatment has been, I must confess, a rank failure, though I have tried every form of harness that is supposed to do the work. In nearly 85 per cent of my cases I finally had to resort to open operation. The mechanical treatment of this type of hernia is also not altogether devoid of danger. In my own limited surgical practice I was called upon to operate for strangulation once in an infant two days old; once in one seven days old, and once in one ten days old, and twice in children under three years of age. The operation of herniotomy in children is not necessarily fraught with any great amount of hazard. It should not take longer than ten minutes to perform it, and the added precaution

should be taken to prevent any appreciable loss of blood, as children do not stand loss of blood very well. In my own experience of forty-three operations in children during the first three years of life, performed during the past five years, I have not lost a single child and obtained a hundred per cent of cures. The only thing worthy of note in connection with the technique of this operation, is the absolute necessity of excising the sac in order to obtain results. The canal need never, or practically never, be repaired. Removal of the sac and suture of the skin incision completes the operation. Any amount of reconstruction of the canal, without removal of the sac, will result in failure. I dwell upon this point, because within the year I was called upon to reoperate on two children, because in the previous operation the surgeon contented himself with reconstructing the canal without removing the sac. In both instances the hernia recurred within a short time after the operation.

With other types of hernia in childhood I have no experience, and therefore will leave them undiscussed.

## Rectal Defects.

One of the most common malformations associated with the lower part of the alimentary canal is a failure of the rectal outlet—Atresia recti, or imperforate anus.

Any part of the anal or rectal canal may be the site of closure, and there are therefore several types of atresia of the rectum. (A) Congenital narrowing of the anus without complete occlusion, or without fecal fistula elsewhere. (B) Closure of the anus by thin membranous tissue. (C) Entire absence of anus, the rectum ending in a blind pouch, at varying distances from the perineum. (D) Imperforate rectum, with anus normally placed, and many others.

Some one of these defects is said to occur in about one in eight or ten thousand births.

My own experience is limited to one case of complete absence of the anal opening. A brief description of that case will perhaps best illustrate that condition and its surgical management.

The child, male, is the third in the order of births from apparently healthy parents. The delivery was normal; the child cried lustily when born and weighed seven and a quarter pounds. No other abnormality present. The defect was not recognized by the attending physician at the time of birth, 9:00 p. m. On the physician's visit the following morning he ordered castor oil given to allay the colicky pains that the baby was manifestly suffering from at the time. Pare-

goric was given that evening and more castor oil the following morning. An enema was later attempted and the condition for the first time recognized. Dr. W. H. Neilson, who was called in consultation, kindly referred the case to me for operation.

The operation took place at 9:30 that night, a little over forty-eight hours from the time of birth. A slight dimpling of the skin indicated the probable site of an intended anus. An incision was made at that point through the skin and fascia and then blunt dissection was resorted to with forceps and little finger for about two inches, when an enormously dilated rectal pouch was entered into. Nearly a pint of meconium was removed. The wound was then extensively retracted, the terminal margins of the gut caught in forceps and freed from its bed throughout its entire circumference for a sufficient distance so that it could be pulled down to the level of the skin to which it was united with catgut suture. A rubber drainage tube large enough in circumference to keep the artificial canal thoroughly dilated was inserted and held in with sutures. A dressing was applied and the child sent home with its mother. The tube was removed on the fourth day and thereafter the canal was manually dilated with the little finger every other day for a month. The child is now nine months old is in perfect health and apparently has a normal anus with perfect sphincteric control.

## Spina Bifida.

A child born with a split spine assuredly has a gloomy outlook before it. In the first few days of the life of a child born with a bifid spine, the fear of the physician and parents is that the child is going to die; in the following days the actual fear really is that the child is *not* going to die and instead will be compelled to endure the miserable existence associated with such a condition, which is oftentimes worse than death. It is estimated that about 90 per cent of the children born with split spines, if untreated, die within the first few weeks of life, and of the remaining 10 per cent only a small portion survive over five years. Truly a desperate situation.

Dana recognizes three varieties of spina bifida:

(A) Meningocele; an absence of the vertebral arches of one or more vertebrae, or a defective coalescence of the spinous processes of one or more vertebrae, through the cleft of which protrudes a sac composed of spinal meninges, containing cerebro-spinal fluid only. The sac may or may not be covered with skin.

(B) Meningomyelocele; the tumor is composed of meninges, cerebro-spinal fluid and cord.

(C) Syringomyelocele; composed of meninges, cerebro-spinal fluid and spinal cord, with an enormous dilatation of the central canal of ependyma.

To these may be added spinal bifida occulta, which is a cleft of the spinal column without any visible protrusion of the contents of the spinal canal.

In the first variety, meningocele, the cord elements may be intact, and the condition may present no special symptoms, apart from the presence of the tumor. These cases lend themselves most readily to surgical interference and give the best results. Excision of the sac and closure of the defect is all that surgery here needs to do. Of this type of spina bifida I can report one case, that of a child a little over 2 years old. In this instance relief was sought mainly because of ulcerative sores on the buttocks that would not heal under ordinary treatment. The sac was opened, excised and the defect in the spine covered over with the thick fascia of the latissimus dorsi muscle and skin, after a manner I once demonstrated before this society. The child made an uneventful recovery; the ulcerations healed promptly and so far have not recurred, now a period of over eighteen months.

In the second variety, meningomyelocele, the cerebro-spinal fluid lies in the subarachnoid sac; the nerve elements of the cord protrude into the sac, are usually attached on the posterior and median surface of the sac, and form a part of the cyst wall. This is probably the most common type of spina-bifida. With this type there is usually a paralysis of the bladder or rectum or both, often combined with varying degrees of paralysis, and sensory and trophic disturbances of the lower extremities. Other abnormal conditions may also be present,—hydrocephalus, club foot, spinal curvature or defects elsewhere. It is to this type of spina bifida that I especially desire to direct your attention, as a great deal can be done surgically to help these poor unfortunates. Of this, more later.

The third variety, syringomyelocele, is the most aggravated form, and differs from the type just described in that there is a dilatation of the central or ependymal canal, with complete or almost complete pressure atrophy of the spinal cord at the point of dilatation, with a paraplegia below that zone.

The inner lining of the sac in this variety is formed by the meninges and thinned out spinal cord. Even this type of spina bifida, it has been demonstrated of late is amenable to surgical treat-

ment, providing the injury to the cord is confined to the cauda equina, the terminal portion of the cord, extending from below the first lumbar vertebra to the second sacral. It is the portion of the cord most frequently implicated in spina bifida. Dr. Murphy and others have demonstrated conclusively, clinically and experimentally, that when nerve fibres having a medullary sheath, or a neurilemma, as are all extramedullary or peripheral nerves, are divided and the severed ends united by suture, regeneration of the destroyed nerve tissue ensues and functional perfection is obtained. If a non-medullated nerve is severed—nerves without a medullary sheath or neurilemma, it never regenerates. Dr. Murphy aptly sums it up in this way: "The key therefore, to the surgery of nerves is purely the neurilemma; i. e. nerves with a neurilemma are all capable of regeneration under proper surgical conditions; those without a neurilemma are incapable of regeneration." The fibers of the cauda are made up of neurilemmic centrifugal axones from the spinal cord ganglion cells, and of centripetal sensory axones from cells in the spinal ganglia, all being neurilemmic from the place they leave or enter the conus, and are therefore capable of regeneration, the same as peripheral nerves. Based upon this assumption, Murphy operated with good results on a case of syringomyelocele in a boy three years old, where he excised about an inch of the cauda and brought the ends, upper and lower, together with suture. The child had complete paraplegia with absolute motor paralysis, anesthesia and analgesia and loss of sphincter control. There was a pressure destruction of the caudal nerves just below the exit from the conus, not producing a destruction of the conus ganglionic cells or axones. The cord was dilated from the center with complete pressure destruction for an inch or more. The central cicatricial mass was dissected out, the ends of the caudal fasciculi united with catgut sutures and the divided lateral nerves (lumbar plexus) attached to the line of spinal suture.

I adopted the same technic, as near as I could, in a child twenty months old, the first and only child of a medical friend of mine in a neighboring state. More than an inch of the cauda was excised and the ends, upper and lower, brought together with catgut sutures. An electric test, one pole at the upper and one at the lower end of the cord, and with both poles on the lower segment, showed marked muscular response in both lower extremities. The child was in good condition at the end of the operation; lived for five days and then developed convulsive seizures in one of which he died. It is difficult at this time to trace the exact cause for these convulsive attacks; like-

wise is it difficult to prophesy what the results in this case would be, had the child lived; but the muscular responses to the electric test proves fairly conclusively to me the rationale of the operation.

Much less complicated is the operation for myelomeningocele. Here the entire thickness of the caudal fasciculi is not affected; rather the trouble is confined to individual nerve fibers, and these should be treated as nerve fibers of the neurilemmic type similarly affected elsewhere in the body. If the sciatic nerve is severed, constricted or a portion of it otherwise affected, there is a definite surgical procedure that is to be followed. Here also the same procedure is to be followed along the same lines. If the individual nerve fibers are adherent to the sac they should be separated and freed. If constricted by bands of adhesions, these should be severed, the constricted portion of the nerve excised, and the ends united by suture. In short, the surgeon should, for the time being, forget that he is dealing with the spinal cord, but rather with a bundle of neurilemmic nerve fibers.

Following this technic I operated successfully five and a half years ago, for myelomeningocele in a girl fifteen years old. This girl was suffering from paralysis of the bladder and rectum, with various trophic and sensory disturbances, and deformities of both feet. She was a nuisance to herself and to those that cared for her. She was denied surgical aid in various hospitals abroad and in this country, on the supposition that it could not benefit her. She was shown before this society a short time after the operation, greatly improved. She is now in perfect health, entirely cured from her afflictions and is occupying a position of some trust in a large millinery concern in this city. The deformity of her feet is the only symbol of her former ailment, and even this has since been markedly corrected by several osteotomies. A year later I operated for the same condition in a girl eight years old. Paralysis of the bladder and trophic ulcers over the gluteal region that would not yield to treatment, caused her to seek surgical aid. She made a complete recovery and is now in perfect health.

In summing up the advisability of operative interference in spina bifida, especially in the syringomyelia type, most writers take a very pessimistic view of the situation and advise against interference; the mortality rate they claim is too high and the results, in case the operation is survived, are not always what could be desired. True enough if there was something better to offer. Merely to shirk responsibility and allow the child to die, or to live in a paraplegic state, without at least attempting to aid it, is not my notion of the

duty of a physician. If we can but restore one individual of that type to health and usefulness in a life's endeavor, the task is worth the undertaking.

---

# A PRELIMINARY REPORT OF THE VALUE OF BACTERINS IN PNEUMONIA.

BY WILLIAM EGBERT ROBERTSON, M. D.,
AND GEORGE MORTON ILLMAN, M. D.,

PHILADELPHIA.

It is our desire to place on record the results obtained in the treatment of fifty cases of pneumonia, under our care in the Samaritan Hospital, during the winter months of the end of 1909 and beginning of 1910, some with and the balance without bacterins, without any pretence of a study of the literature or the presentation of an exhaustive report. Nor have we attempted to furnish collateral evidence in the shape of laboratory results, preferring to submit solely the clinical evidence, that which must of necessity be the guide of the family doctor, whose time, or rather lack of time and training, does not permit of the refinements, and who is compelled therefore to be governed by practical experience, fortified by the teachings of those investigators whose experimental work is capable of expression in terms of direct applicability. In a later communication we intend to present our results covering a larger number of cases, chiefly lobar pneumonia and typhoid fever, with especial reference to the laboratory findings.

It is too late in the day to attempt a defense of bacterin, opsonin, or vaccine therapy, as it is variously styled. It has so incontrovertibly proved its value in certain of the infections, notably the pyogenic infections, that we possess abundant justification for further effort along the same lines. It has the advantage, too, of being a natural method, not empirical, yet it must be confessed that we are at present merely groping our way, though not at all in the dark.

Except in the case of a few animal parasitic diseases, especially malaria and syphilis, recovery from an infectious disease depends on the ability of the host to produce, through the activity of his body cells, substances called antibodies, excited and called forth by the invading agent, these antibodies possessing antidotal power, inimical to the further growth and activity of the antigen or infecting germ, and encompassing its destruction by specific bacteriolytic substances.

Naturally, success will depend on several factors, such as the degree of virulence of the infection, the ability of the individual to resist, or a combination of these. In the case of diphtheria and tetanus, this statement must be modified to some extent, for the organisms causing these diseases produce a soluble toxin, separate from the germ bodies, an exotoxin in contradistinction to the endotoxin of other germs, and the reactive substance, or antitoxin, is likewise soluble and extracellular, and has no bacteriolytic action. In these diseases, the antitoxin should be given sufficiently early, especially in the case of tetanus, while the toxin is wholly free, circulating, not fixed by any groups of cells, and before severe secondary toxalbumic changes have arisen; under these conditions recovery is assured, for it is merely a matter of neutralization of a poison. The reactive substances due to endotoxins, however, are only in a small measure soluble, *i. e.,* free in the blood serum. By far the greater part remains bound to the body cells, *i. e.,* to the tissue cells of the infected individual. Hence it is this natural process which we strive to imitate, when we inject dead cultures.

Under ordinary conditions, in the presence of living germs rapidly multiplying, the protective defenses are taxed by the continuous production of toxins. It would seem ill advised, therefore, to employ bacterins, when the patient is already overwhelmed. Especially would this seem contraindicated in bacteremias of which lobar pneumonia and typhoid may be cited as types. Practically, however, the objection fails, for not only does no harm result from properly spaced doses, but after the reaction, when one occurs, in many instances very definite betterment results in the patient's condition. This is so apparent, at times, that one is encouraged to employ bacterins routinely; but unfortunately, when no good follows, though absolutely no appreciable harm is done, the results are nil. We can only speculate as to why such definitely beneficent results occur in some cases and in others no results at all.

Thus we are forced to confess that we still lack concrete knowledge on this topic, and that a vast amount of work will be necessary before we are put in possession of an absolutely trustworthy therapeutic measure. Impartially judged, except for some of the superficial pyogenic infections, one's results with bacterin or vaccine therapy are somewhat disappointing, less so of course when one treats an infection very early in its course, before degenerative changes have occurred; but, we repeat, the knowledge that, whenever recovery

occurs, it is due to reactions induced by these same germs, is the alluring fact that entices and justifies us in further pursuit.

The mortality from pneumonia is so appalling, the number of cases apparently on the increase, and the results of treatment generally employed have proved so disappointing that one rather naturally endeavors to combat that disease by these more recent measures now under consideration.

Townsend and Coolidge report 1,000 cases of pneumonia treated in the Massachusetts General Hospital from 1822 to 1899. In the earlier years most heroic measures were employed, bleeding, emesis, and free purgation, yet the mortality varied but slightly, the average for the series being but 25 per cent. Nor was there any modification in the duration of the disease.

Ashton and Landis cite 991 cases in the Philadelphia General Hospital from May 1, 1897, to October 1, 1904, uninfluenced by treatment, with a general mortality of 53 per cent.

Sears and Larabee also report the disease uninfluenced by treatment in 949 cases occurring in the Boston City Hospital from 1895 to 1900, the mortality rate being 35.9 per cent.

Norris reports a mortality of 47 per cent among 445 cases treated in the Philadelphia General Hospital by the fresh-air method.

Musser and Norris give a mortality rate of 21.06 per cent in 43,455 collected cases, while Wells gives 20.4 per cent among 465,400 collected cases. Leary quotes Townsend and Coolidge[1] as giving the mortality of pneumonia in alcoholics at 41 per cent, and Sears and Larabee 45.5 per cent in the same type of case. Of 34 alcoholics with pneumonia, treated by vaccine furnished by Leary, 6 died, a mortality of 17.7 per cent, while of 49 cases in general (non-alcoholics), but 2 died, a mortality of 4.08 per cent; and of these 49, 15 per cent came to a crisis in three days. The mortality for the two groups, 34 and 49 cases respectively, was 8, or 9.7 per cent. These figures are striking indeed when compared with the preceding citations. Even more so are the results reported by Craig[2] in the treatment of pneumonia of the aged with pneumococcic bacterins. He says practically all the inmates of the Sailors' Snug Harbor Hospital are over sixty years old, and the pneumonia mortality averages about 60 per cent. Recently all cases have been treated by autogenous vaccines obtained by culture of the patient's sputum. Since then eight patients have been treated, ranging in age from sixty-six to eighty-three years. All recovered. Dr. Willcox[3] reports 24 cases in which a stock vaccine was injected at once and an autogenous vaccine

as soon as prepared. Cultures were made from sputum, blood and pleural cavity, or from the superficial part of the lung. Twenty to fifty millions were given and a second injection in twenty-four to forty-eight hours. Smaller doses were employed as the time of crisis approached, as he believed the case more susceptible at that time. In many instances a prompt fall in temperature occurred and the dyspnea and delirium were lessened. The course was also shortened in some instances and in 8 of the 24 cases, temperature fell by lysis. Treatment should be begun early, he contends. Harris claims to have seen a crisis occur in one case on the first day of the disease, eleven hours after inoculation.

In our own series of 50 cases, 30 were put on our usual routine treatment, and 20 were given bacterins in various doses. This latter group was not selected in any way, nor was the series continuous. Admitting the value of autogenous vaccines, it does not seem likely that the time will come when it will be possible for the family doctor to procure them. Granting his technical ability to make blood cultures, he would not have the time; nor could the state or municipal authorities cope with the vast amount of laboratory detail such an undertaking would entail. A remedy, to be of practical value, must be one easy of attainment. Such is the case with stock cultures. These can be made from any number of strains, and like antitoxin fall readily into the class of commercial products, or may be furnished gratuitously by city or state for the indigent. We elected to employ stock cultures therefore, and through the courtesy of Mulford and Company, to whom we supplied pneumococcic sputum, we received pneumobacterins, representing many strains. When we had them on hand we used them for any case of pneumonia in the wards; when without them, we employed the usual routine measures, hence the twenty cases herein reported were scattered over the winter months. They were of all grades of severity and extent of pulmonary area involved.

The cases treated by bacterins seemed to divide themselves into three distinct groups: (1) Those in which the injection was followed by a prompt fall of temperature to normal, there to remain, with a rapid amelioration of all the symptoms; (2) those in which there was a prompt fall of temperature to or below normal, but in which a subsequent rise occurred, not quite so high as that previously existing, this in turn followed by lysis to normal in twenty-four to forty-eight hours; (3) those in which no appreciable result occurred, no change

in temperature or symptoms, no modification whatever occurring, the termination being by crisis on the ninth day.

These findings are difficult of explanation unless we postulate the existence of numerous subvarieties of pneumococci with differences too subtle to be revealed by culture, but with biologic differences manifested by the type of reaction following their injection. We employed doses varying from 25 to 600 millions, and it seemed to us that our results were more definite with the larger amounts. The earlier it was given, the more decided was the clinical reaction, and strikingly suggestive was the fact that in many instances the temperature reached normal on the even days, often on the fourth or sixth. It does not seem possible to give any rules as to dosage, however. Whenever we note malaise, lassitude, headache, chilliness or, more particularly, definite rigors, with or without a local reaction, accompanied by a rise of temperature with a subsequent fall to a lower level than that previously existing, it would be unwise to give a larger dose on a subsequent occasion to that patient. Of course, the estimation of the opsonic index is of admitted value to this end, but it is not possible as a routine in practice, and as it only reveals a tithe of the antibodies resulting from the use of an antigen, it is not an antitoxic index, so to speak. Macdonald found the opsonic index to be low during the course of the disease in 8 cases, rising suddenly to 1 6 at the period of crisis.[4] For practical purposes it is conceded today that clinical phenomena suffice for the determination of the dose of bacterin to be used in any particular case.

We believe that no fixed and nonvariable germ exists. We are already in possession of the fact that a large variety of streptococci is extant, and it is equally well known that, from the colon group, on the one hand, through the para forms to the typhoid group at the other extreme, numerous subvarieties exist. It is probably true of all other organisms. In some instances this is patent even by cultural methods, but in others the changes are too subtle to be revealed in that way. It would seem more rational therefore to employ autogenous strains, but, as has been stated, this would condemn the use of bacterins in large part, as far as the general practitioner is concerned. In lieu of this, the commercial product aims to represent as large a number of individual strains as possible.

Whether it will be possible to sensitize bacteria, thereby increasing their immunogenic and bacteriolytic properties, is a question. We are engaged in some work along this line, but at present have nothing

definite to offer. Theoretically it does seem likely that we should be able to imitate nature by so modifying germs as to enable us to procure more uniform results. Occasionally we note hypersusceptibility on the part of an individual, as for example in a case of typhoid fever under the care of one of us. This patient, a man, with each of the first two doses had a distinct rigor and marked depression, with headache and malaise, though without much temperature change. He had a most intense local reaction, with heat and swelling and a zone of redness extending several inches in every direction beyond the point of injection. He was given 1000 millions in his arm. Except for the initial hypersusceptibility it is not likely that injections will be spaced over a time sufficiently long for the production of more serious evidences of anaphylaxis, but that such a contingency may arise under certain conditions is a fact at least worthy of comment.

As is well known, more or less evidence of the influence of pneumotoxin on the kidney structure and function is present in the majority of cases of pneumonia. Böhm of Berlin in an inaugural dissertation[5] says that of the 52 cases of pneumonia analyzed in his thesis, 84.6 per cent had albuminuria, and 78.8 per cent had tube casts. In our series of the 30 cases treated without bacterins, 26 showed an albuminuria ranging from a decided trace to a heavy precipitate, a percentage of 86.6 per cent. Four were negative. Of the 20 cases receiving bacterins, 17 showed a more or less well-pronounced albuminuria, a proportion of 85 per cent. Three were negative. The percentage for the entire 50 cases was 86.0, almost identical with the figures given by Böhm. It does not seem therefore that we are able to exercise much, if any, influence on the toxemia in pneumonia of which the renal change is an expression, by the use of bacterins. The microscopic finding in our series ran parallel with the chemical, advancing with the progress of the disease, rapidly disappearing after the crisis. In those cases in which a more or less well-marked nephritis antedated the pneumonia, as judged by the urinary findings at the time of admission, the attack of pneumonia was more severe and the prognosis more grave. In one of the cases receiving bacterins, a very severe nephritis was present when she first came under our care. She struggled along to the crisis, temperature remained normal for three days, but she did not improve. She then developed uremia, the temperature mounted rapidly, and death occurred in forty-eight hours, five days after the crisis.

The mortality in the series here reported was as follows: Of the

30 cases not given bacterins, 12 died, or 40 per cent; of the 20 to whom bacterins were given, 3 died, or 15 per cent; or, exclusive of the woman who died uremic, the mortality in the 19 cases was 10.5 per cent. Despite our lack of uniformity in the results from the bacterins, these figures are striking enough to justify their continued use. Much study and research are requisite, as we are far from the results possible in the use of antitoxin in diphtheria, yet even with this latter, it was a long time before some of our confreres were convinced of its efficacy.

## Summary.

1. In some instances strikingly prompt and beneficent results follow the use of bacterins, but since these results are not uniform, something is lacking in the employment of dead cultures as at present practiced.

2. Care should be taken in their preparation, as it is probable that their biologic properties may be destroyed by the degree of heat used to kill them. A temperature not over 56 degrees would be advisable, or carbolic in the proportion of ½ per cent may be employed.

3. Not enough data are at hand at present to enable us to discuss the value of the nontoxic and antigenic moiety of autolyzed pneumococci, prepared as directed by E. C. Rosenow.

4. Nephritis, when pre-existing, is of grave prognostic import.

5. Bacterins apparently do not exercise any influence, pro or con, on the renal condition.

6. In our series, the mortality was notably less in the cases given bacterins.

## REFERENCES.

[1]*Boston Med. and Surg. Jour.*, Vol. CLXI., p. 715.
[2]*Med. Record*, N. Y., Feb. 12, 1911.
[3]*The Lancet*, Aug. 14, 1909, p. 471.
[4]Proc., Royal Med. Soc., Vol. I., No. 2, p. 45.
[5]Reviewed in *Deutsch. Med Woch.*, Nov. 18, 1909, p. 2025.

---

**Experiences on Palliative Trephining in Papillitis.** von Hippel, A., Goettingen (Klin. Mon. für Aug. 29, II, July, 1911, p. 47), reports on 14 cases, observed by him within the last two years, and operated on by the late H. Braun. In none a localization of the disease was possible, although all were carefully examined at the neurological clinic. Generally, an opening of the size of a 50 cent piece was placed in the parietal bone, only in three in the temporal bone, and the dura incised at once. If the brain

bulged, a puncture of the ventricle was made. The skin was carefully sewed. In two cases large encephaloccle followed the rapid growth of the tumor. Although some cases were operated upon after the disease had existed for years, there was no immediate death after the operation. Hence v. H. considers the danger of the operation under the improved technic very slight, so that it can be conscientiously recommended. In two out of nine cases operated on at the left side, aphasia occurred, so that the right side ought to be given preference, if the affection cannot be located in the left side. The papillitis completely subsided in all cases which remained alive for a longer time and in others constantly decreased till death. The time in which the first improvement could be distinctly observed ophthalmoscopically, fluctuated between two and seventeen days. Twice the papillitis subsided more rapidly on the side of the operation, although the previous swelling had been the same on both. This speaks in favor of the opinion of Horsley, that the intracranial pressure may be different in both hemispheres and for his advice of operating on the side on which papillitis developed first as the probable seat of the tumor.

Also from the experience of A. von Hippel, palliative trephining is undoubtedly the most valuable remedy for papillitis, if performed in time, i. e. before considerable deterioration of vision or atrophic discoloration of the disc. In eight of his patients the V, from 3/10 to 1 before operation, remained unaltered or was improved, in the others V, reduced to counting fingers at 1 or 2 mm, could not be saved in spite of the subsidence of papillitis. Seven out of the fourteen cases are still living. In four not only the papillitis is cured, but all other symptoms of increased cerebral pressure have entirely disappeared. Two lost the very violent headaches, and one suffers from headaches only at night, but in all three the papillitis is cured, vision preserved and the general condition very much improved. The autopsies of five cases revealed glioma or sarcoma, in a child with hydrocephalus, tuberculosis meningitis.—C. Zimmermann.

---

**On Some Arthritic Ocular Affections.** OLIVERES, A., Tortosa, Spain. (Zeitschrift für Augenheilkunde, XXIV, September 1910, p. 226.) Within the last 3 years O. paid especial attention to gout as cause of eye diseases and always found this diathesis in persons who complained of uscae volitantes. Perhaps hyperacidity of the ocular fluids may explain their occurrence. Proper nutrition, the use of alkaline water, physical exercise, treatment of affections of the stomach and liver yield admirable results. In 2 obstinate cases subconjunctival injections of benzoate of lithium were very effectual.

Ophthalmic migraine is the 2nd affection which, according to O., undoubtedly has a relation to gout. In 5 cases the symptoms of gout were evident and the good results obtained with antarthritic treatment confirmed this view. The autointoxication in gout overloads the different organs with toxic substances which in the vaso-motor net work may under certain conditions lead to disturbances of circulation in the brain and thus elicit an attack of migraine. C, Z.

---

# WISCONSIN MEDICAL JOURNAL

OFFICIAL PUBLICATION OF THE STATE MEDICAL SOCIETY OF WISCONSIN.

A. W. MYERS, M. D., Editor.
141 Wisconsin Street, Milwaukee.

J. P. McMAHON, M. D., Managing Editor.
141 Wisconsin Street.



Publication Committee:

A. J. Patek, M. D., Milwaukee. G. E. Seaman, M. D., Milwaukee
O. H. Foerster, M. D., Milwaukee. C. S. Sheldon, M. D., Madison.
S. S. Hall, M. D., Ripon.

Collaborators:

The Council.

M. R. Wilkinson.....Oconomowoc
G. Windesheim.....Kenosha
F. T. Nye.....Beloit
W. Cunningham.....Platteville
J. V. Mears.....Fond du Lac
H. W. Abraham.....Appleton
Edward Evans.....La Crosse
T. J. Redelings.....Marinette
O. T. Hougen.....Grand Rapids
R. U. Cairns.....River Falls
J. M. Dodd.....Ashland
H. E. Dearholt.....Milwaukee



Annual Subscription. - - - $2.00. Single Copies, - - - - - $0.20

Address all business communications to
WISCONSIN MEDICAL JOURNAL,
504 Goldsmith Building, Milwaukee.

[Entered as second class matter, June 30th, 1903, at the Post Office at Milwaukee, Wis., under Act of Congress, March 3rd, 1879.]

Vol. X. MAY, 1912. No. 12


## EDITORIAL COMMENT.

### THE WAUSAU MEETING.

Full particulars of the Wausau meeting are published in this number of the Journal together with the final programs for both the General Session and the Association of County Secretaries and State Officers.

The only thing which is not down in black and white, but for all that its most important feature, is the spirit of friendliness and good fellowship, the true fraternal spirit, which should pervade the meeting.

Let us all go to the meeting to renew old friendships and to make new ones among those who are united to us by the ties of brotherhood in our chosen profession.

## THE SECRETARIES MEETING.

Do not fail to see to it that the Secretary of your County Society is at Wausau in time for the meeting at 1:30 p. m., Tuesday, May 21, and, if possible, be there yourself. This is actually one of the most important parts of the annual gathering and its worth is being appreciated by all those who attend, even if they are not present in an official capacity.

It helps the imagination to grasp the possibilities of what we can accomplish if we work together.

## TREATMENT OF PUERPERAL INFECTIONS.

It is always refreshing and stimulating to meet a man with definite, well-considered ideas on a subject which has been debated to the point of confusion.

The paper on the Treatment of Puerperal Infections, by Dr. T. J. Watkins, of Chicago, which will be found among the original articles in this issue of the Journal, is one which will make us all "sit up and take notice." Dr. Watkins knows his own mind and his results show that he has good reason to have faith in the plan of action he recommends.

## A CORRECTION

In the April Journal the paper by Dr. W. E. Fairfield of Green Bay on *Some Observations upon Intra-Peritoneal Infections* was credited to Dr. W. E. Fairchild, a mistake for which the Proof-reader presents his humble apologies to Dr. Fairfield. In order to make a thorough piece of work of it, a further error was perpetrated in this same article by failing to detect the printer's change of the word "with" to "without," on the fifth line from the bottom of page 633.

## CHANGE IN FORM OF THE JOURNAL.

With this number the Wisconsin Medical Journal completes its tenth volume, the last in its present form. It has seemed expedient to the Publication Committee to adopt a slightly larger page, divided into two columns, resembling more closely the form of journal published by the State Medical Societies of our neighboring states.

The June issue, the beginning of Vol. 11, will be the first to appear in the new form. It is hoped that the change will be popular, and, incidentally, profitable.

## SCARLET FEVER AT ROCHESTER.

On another page of the Journal is a letter which was sent to the secretary of the State Medical Society at the request of a physician in good standing in a neighboring state, who is said to be one of the sufferers from the epidemic referred to in the letter.

We have no doubt about the good faith of the writer of the letter, but as we have no knowledge of the facts in the case we shall simply publish it for what it is worth.

## WAUSAU

As it is interesting to know in advance something about a place which is to be visited, we are publishing on page 732 a statement of a few facts concerning the enterprising and progressive city of Wausau, where the Sixty-sixth Annual Meeting of the State Medical Society of Wisconsin will be held.

We all know that Wisconsin is a great State. We can sit in our office chairs and make that statement with emphasis and even conviction.

But the only way to find out *how* great it really is, is to look it over in some detail ourselves. And the plan of moving about from year to year the place of meeting of the State Medical Society gives an excellent opportunity to get acquainted with Wisconsin as a whole as well as to get acquainted with the medical profession of the State as a whole. It is not good for any of us to think that our little corner or our little group of friends makes up the whole picture.

---

## CORRESPONDENCE.

April 29, 1912.

Charles S. Sheldon, M. D.,
Madison, Wisconsin.

Dear Doctor: Saturday, April 20th, Dr. ——— and Dr. ——— of this city were joined by Dr. ——— of ———, and went to spend a week at Rochester, Minnesota. Both Dr. ——— and Dr. ——— contracted scarlatina there and are now under three weeks' quarantine. Inasmuch as the A. M. A. meets soon and hundreds of physicians will be planning to go through Rochester, Minn., Dr. ——— felt that the situation there should be explained to you and that you should use all

your influence to warn physicians against stopping there. He did not wait until he could write you personally, as he felt it imperative that the warning should be sent out now, as the infection is virulent and is attacking adults mainly.

The following is a brief statement of conditions there which he had sent to us to place in your hands. There is a virulent epidemic of scarlatina at Rochester, Minn. Fixed population about 3,500; floating population about 1,500. The hotels and boarding houses are crowded with physicians and patrons from every part of the United States. A large portion of the population circulates through the three theaters every few days. Numbers of exposed physicians and patients go to the hospital daily. Dr. ——— and Dr. ——— were sick at the surgical clinic, having to leave before it was over. The same morning two or three other visiting doctors at the clinic were complaining of sore throats. Only about 60 cases have been actually reported, whereas fully three to four times that number have not been. These cases are mainly in the hotels and large boarding houses and the true facts are kept secret. There has been no warning to outsiders of the true conditions.

Dr. ——— and Dr. ——— feel quite certain that they contracted the fever from sleeping in infected rooms at the hotel.

Yours respectfully,

. . . . . .

---

## ANNOUNCEMENT.

1. The Third Annual Conference of County Secretaries will be held at the Elk's Club Rooms at 1 o'clock p. m., Tuesday, May 21st. The officers of the Society, including the Council and all the County Secretaries are expected to be present, and other members of the Society are cordially invited.

2. The House of Delegates meets at the same place on Tuesday evening, May 21st, at 7:30 o'clock. Please see to it that your delegate is promptly on hand.

3. The first meeting of the Council will be held immediately after the meeting of the House of Delegates.

4. The first General Session will be held at the Elk's Club Rooms on Wednesday, May 22d at 11:30 a. m.

5. The Annual Smoker will be held at the same place on Wednesday evening, May 22d at 8 o'clock. Attorney M. B. Rosen-

berry, of Wausau, will give an address on "Medical Expert Testimony."

6. A Reception for visiting ladies will be given at the same hour by the wives of the Wausau physicians at the Wausau Club House.

7. The Annual Banquet will be held at Rothschild Pavilion on Thursday evening, May 23d at 8:30 o'clock. Toasts of a high grade and music by the Saw-bones Choir. This will be preceded by an automobile ride about the town, beginning at 7 o'clock.

8. The Pathological exhibit will be in charge of Dr. L. E. Spencer, to whom specimens may be sent.

9. If you have not already paid the 1912 dues, please do so at once. You have put it off too long already, and we must have your renewal before the meeting.

10. The Registration office will be at Elk's Hall. Report as soon as you reach town. Register, receive your badge, and get your Banquet ticket. Please do not neglect this, as it is the only record of attendance.

---

**HOTELS AND RATES.**

| | Per day. |
|---|---|
| Hotel Bellis (American) | $2.25 to $3.00 |
| Hotel Northern | 1.25 to 1.50 |
| Hotel Crystal (Rooms) | .50 to 1.00 |
| Hotel Central | 1.00 |

It is urged by the committee that hotel reservations be made in advance.

---

**Program Third Annual Meeting of the Association of County Secretaries and State Officers of the State Medical Society of Wisconsin.**

ELK'S CLUB.

WAUSAU, MAY 21, 1912.

ST. BOOSTHEIMER'S DAY, May 21, 1912.

THEME OF MEETING

*"Work the County Society Should Accomplish."*

ONE-THIRTY P. M.

Annual Address of the President.....W. F. ZIERATH, Sheboygan

SOME THINGS THE COUNTY SOCIETY CAN DO.

For the Public Health.....HOYT E. DEARHOLT, Milwaukee

DISCUSSION.

FLORA A. READ, Fond du Lac C. H. GEPHART, Kenosha

To Increase the Respect and Confidence of the Laity.....
.....A. R. CRAIG, Secy. A. M. A., Chicago

DISCUSSION.

M. B. GLASIER, Bloomington M. D. BIRD, Marinette

To Advance the Material Interests of Its Members.....
.....R. C. FAULDS, Abrams

DISCUSSION.

J. A. SCHMIDT, Brillion F. P. DOHEARTY, Appleton.

To Aid in Securing Needed Medical Legislation and Enforcement of Present Medical Laws.....A. W. GRAY, Milwaukee

DISCUSSION.

I. E. LEVITAS, Green Bay A. L. BEIER, Chippewa Falls

To Help the State Medical Journal.....A. W. MYERS, Milwaukee

DISCUSSION.

G. F. DAWLEY, New London J. C. WRIGHT, Antigo

For the State Society.....CHARLES S. SHELDON, Madison

QUESTION BOX. Send in any troublesome question or topic you want brought up for general discussion.

BUSINESS MEETING AND ELECTION OF OFFICERS.

SIX P. M.

GINGER TEA.

Tea-master.....O. T. HOUGEN, Grand Rapids
Tea-Totaler.....C. A. ARMSTRONG, Boscobel
Tea-Singer.....C. S. SHELDON, Madison
Tea-Spooner.....S. M. B. SMITH, Wausau
Tea-Kettler.....S. S. HALL, Ripon

"GINGER TEA" AT THE WAUSAU CLUB.

## PROGRAM.

### WEDNESDAY, MAY 22.

AFTERNOON SESSION, 2 P. M.

1. Annual Address of the President. J. M. Dodd, Ashland.

2. Public Housekeeping with Reference to Sanitation. Julia Riddle, Oshkosh.

   The paper is frankly a discussion of equal suffrage for women in its relation to sanitation, from the point of view of a physician. Women in particular know the value of pure food and proper housing conditions, the factors in eugenical and child welfare problems, in other words the problems of the home, the city, state and nation. Man's point of view is that of business, party and policy, woman's that of home, heart and child welfare. The ship of state is not well ballasted. Masculinity and business weigh down one rail, while home, health and heart—the woman's viewpoint—would bring it to an even keel.

   Discussion opened by
   C. J. COMBS, Oshkosh.
   J. M. CONLEY, Oshkosh.

3. Gonorrhoea in Women, with special reference to its Prophylaxis and Sequelae. Chester M. Echols, Milwaukee.

   Historical note. Classes of women affected. Difficulties in preventing spread of gonorrhoea. Reasons for failure of police supervision of prostitutes. Prenuptial certificates of health. Prevention of pyosalpinx. Surgical sequelae.

   Discussion opened by
   C. A. KREUTZER, Milwaukee.
   WM. F. WHYTE, Watertown.

4. Practical Laboratory Methods. Joseph S. Evans, Madison.

5. Special Paper—Some Important Points in the Diagnosis of Tuberculosis. F. M. Pottenger, Monrovia, Cal.

### THURSDAY, MAY 23.

MORNING SESSION, 9 A. M.

6. Differential Diagnosis between those conditions Simulating the Symptom-Complex of Neurasthenia. Arthur W. Rogers, Oconomowoc.

   Lack of interest in mental diseases and reasons for same. What is neurasthenia and its symptom-complex? Early stages of certain diseases readily confused with neurasthenia—dementia praecox, hysteria, paresis. Reasons for more care in diagnosis.

Discussion opened by
A. J. PATEK, Milwaukee.
W. F. BECKER, Milwaukee.

7. Anti-Typhoid Vaccination, Its Use and Value. M. P. Ravenel, Madison.

Use of attenuated cultures of bacteria for the prevention of disease first demonstrated by Pasteur. Anti-Typhoid vaccination first successfully done by Sir. A. E. Wright of England. Used in the Boer war with encouraging results. Introduced into the U. S. army as voluntary measure in 1909. In 1911 made compulsory for all officers and men in the service under 45 years. Adopted by the navy and Marine Hospital Service. State Hygienic Laboratory decided to send it free to physicians in fall of 1911. Being used in many parts of the state. Two injections usually advised. In U. S. army three injections are given. First dose five hundred million dead typhoid germs; second and third one thousand million each. Some advise vaccine made of a number of strains. No vaccinated soldier in French army in Morocco contracted typhoid fever. 12.801 men in U. S. army vaccinated during Texas manoevers in 1911, with one case of typhoid and no deaths. 10,759 men had 2,693 cases of typhoid fever with 248 deaths in Jacksonville in 1898, which was about the average in the camps during Spanish war.

Discussion opened by
C. H. STODDARD, Milwaukee.
L. M. WARFIELD, Wauwatosa.

8. The Auscultatory Blood Pressure Phenomenon. Louis M. Warfield, Wauwatosa.

Brief history of auscultatory blood pressure determinations, followed by description of sounds at present differentiated. These sounds known as phases. First phase is a sharp sound, second has a murmur with a rather sharp sound, third a loud snappy sound, fourth a sudden transition from former to an appreciably dull sound, fifth is disappearance of all sound. Sounds are explained. Systolic, diastolic, and pulse pressure discussed and stress laid upon the determination of both systolic and diastolic pressures. Recent development in phase length discussed. Held in general that loud third phase indicates strongly acting heart. Illustrative examples. Personal observations on determination of diastolic pressure, concluding with brief summary of value and accuracy of method, and plea for general use in the estimation of blood pressure.

Discussion opened by
J. A. E. EYSTER, Madison.
A. J. PATEK, Milwaukee.

9. Report of a Case of Diphtheria in which 222,500 Units of Antitoxin and 40 cc. Antistreptococcic Serum were Used. W. H. Banks, Hudson.

10. A City Health Department. M. D. Furstman, La Crosse.
Discussion opened by
H. E. Dearholt, Milwaukee.
R. W. Jones, Wausau.

11. Annual Address in Medicine—the Growing Importance of Preventive Medicine. Joseph H. White, U. S. Public Health and Marine Hospital Service.

AFTERNOON SESSION, 2 P. M.

12. The Diagnosis and Treatment of Foreign Bodies in the Eye. Roentgen Ray Localization of Foreign Bodies in the Eye.
G. I. Hogue, Milwaukee. E. S. Blaine, Milwaukee.
Diagnosis of foreign bodies in the eye by means of inspection, transillumination of eye, the use of the ophthalmoscope in certain cases and the use of the magnet as a diagnostic aid. Patient's statement usually unreliable. Localization by Roentgen Ray most valuable method. Difficulty in locating small bodies and transparent ones. The removal of a foreign body in the eye by means of forceps, which may be magnetized, or by means of the hand or giant magnet. Relative value of each of these instruments. Technic of magnet operations. Incision either through wound of entrance or in sclera. After treatment. Dangers of foreign body remaining in the eye.
Discussion opened by.
G. E. Seaman, Milwaukee.

13. Fever, with Obscure, or Absent, Physical Findings. Edward Evans, La Crosse.
Cases in illustration.
Discussion opened by.
J. S. Evans, Madison.
J. F. Smith, Wausau.

14. The Pathology and Diagnosis of Acute Surgical Diseases of the Abdomen. D. R. Connell, Beloit.
Pathology and diagnosis of acute surgical diseases of the abdomen. Most common ones, acute appendicitis, ruptured extra uterine pregnancy, ulcer of the stomach and duodenum, acute surgical diseases of the pancreas and the gall bladder and its ducts. Symptoms of peritonitis and strangulation of the gut, Lane's kink. A plea for a more early and accurate diagnosis of these diseases. Cases quoted to illustrate these points.
Discussion opened by.
J. F. Pember, Janesville.
J. P. Connell, Fond du Lac.
Arthur G. Sullivan, Madison.
A. C. Helmof, Beloit.

15. Symptoms and Diagnosis of Pathological Conditions of the Caecum and Terminal Ileum. Neil Andrews, Oshkosh.

The pathological condition refers to what is known as Lane's kink—Jackson's membrane, Caecum mobile and inflammation of appendix. The symptoms are well defined and consist of pain, tenderness on pressure, constipation, indigestion, retardation of food through the intestinal tract. In diagnosis must differentiate from salpingitis in right side, ovaritis, movable and tender kidney, cholecystitis.

Discussion opened by.

F. G. Connell, Oshkosh.
W. W. Kelly, Green Bay.
C. H. Nims, Oshkosh.

16. Annual Address in Surgery—The Surgery of the Stomach. W. D. Haggard, Nashville, Tenn.

## FRIDAY, MAY 24.

### MORNING SESSION, 9 A. M.

17. The National Importance of Eugenics. Frank I. Drake, Madison.

Public and private philanthrophy have failed to check the growth of degeneracy. Galton's Standard Table of Descent and its application to national needs. Plato the precursor of the modern eugenic movement. Knowledge of human biology a prime requisite for enlightened statesmanship. A new opportunity for the Christian church to do effective work for humanity.

Discussion opened by.

P. F. Rogers, Milwaukee.
Margaret Caldwell, Waukesha.

18. The Value of Over-Riding as a Method of Curing Diphtheria Carriers. W. F. Lorenz, Madison. M. P. Ravenel, Madison.

In many cases of diphtheria germs persist in the throat for long periods of time in spite of use of antiseptic gargles and washes. In such cases they transmit the disease to others. Over-Riding with cultures of staphylococcus aureus was proposed by Schiotz in 1909. It has been successfully tried a number of times. The State Hygienic Laboratory determined to issue such cultures free. This paper gives results obtained in Wisconsin with special reference to Mendota Hospital. Clinical employment of the staphylococcus spray, method of administration, advantage of both nasal and pharyngeal spray in same case, comparative results with common throat antiseptics, absence of untoward effects or sequelae.

19. Non-Suppurative Nasal Sinus Disease. Samuel G. Higgins, Milwaukee.

All acute and chronic pathological conditions in accessory nasal sinuses not revealed by purulent discharge. Pathology is often confined to

local area in ethmoid cells. Symptoms may be unrelieved eye strain, persistent headache, progressive deafness, head noises, asthmatic attacks and neuralgias. Pathological conditions may be suspected in cases presenting marked nasal obstruction, boggy inferior turbinate with complete occlusion of other side of nose, high deviation of septum, red glistening swollen middle turbinals which are hypersensitive to cotton tip probe and occlude the upper air chambers, and polypi appearing from beneath the middle turbinal. Diagnosis of chronic sinus disease may be made by relief given from treatment at time of acute attack. Operative interference decided upon by study of complete history and of nasal picture. Old style cauterization and removal of low spurs on septum and portion of lower inferior turbinal permissible only when symptoms are of stuffiness of the nose. Operation for nasal sinus disease requires removal of polypi, granulation tissue, and necrosed bone with free drainage of sinuses themselves. Case histories.

Discussion opened by.

J. S. Evans, Madison.

N. M. Black, Milwaukee.

20. Non-Surgical Treatment of Otitis Media. O. N. Mortenson, Waupaca.

Importance of subject to general practitioner as well as otologist. Dangers of Otitis Media—immediate danger to organs of hearing—danger of complications resulting from extension to neighboring organs. Indications for cessation of medical treatment and commencement of surgical. For discussion of treatment subject is divided into acute and chronic otitis and each taken up separately and discussed with regard to the objects of treatment. Direction of treatment. Principles of treatment and methods of applying principles.

Discussion opened by.

L. H. Pelton, Waupaca.

T. E. Loop, Iola.

21. A Study of Tuberculosis in Lafayette County. Jean M. Cooke, Darlington. Susanna Orton, Darlington.

---

## WAUSAU.

Location: On the Wisconsin River, in the heart of the State, the area of Wausau is 6.5 square miles and the population is 17,000. Wausau is 219 miles from Minneapolis, 183 miles from Milwaukee and 268 miles from Chicago, with through train service to these and intermediate points, via the Chicago & Northwestern, and Chicago, Milwaukee & St. Paul Railways.

Climate: With an elevation of 1,220 feet above sea level, the

climate of Wausau is invigorating and healthful. The winters are dry and pleasant with few of the heavy storms common further south and west while the summers are cool and comfortable.

IMPROVEMENTS: Wausau has 11 miles of macadamized streets, and 125 miles of cement sidewalks. The principal business street—Third Street—and parts of other streets are paved with creosoted wooden blocks and have ornamental lighting systems, with the telephone and electric wires underground.

There are 24 miles of gas mains in the city, 39 miles of water mains and 23 miles of sewers. The water furnished by the city is pumped directly into the mains from 40 deep wells at a normal pressure of 55 lbs. per square inch. The rates are low, and a supply of 6,000,000 gallons per day permits lawn and shrubbery of unusual attractiveness.

An efficient department of 40 men, maintained in four stations with $50,000 worth of equipment, affords ample protection from fire. There are 252 fire hydrants connecting with the water mains. There has not been a bad fire in Wausau for twenty years.

A beautiful Public Library has a yearly circulation of 50,000 volumes among nearly 9,000 patrons.

The Marathon County Court House, centrally located in the city, is a substantial structure, valued with furnishings, at $100,000.

A high school and eight ward school buildings with large grounds, representing a total value of $400,000, provide for 107 teachers and 3,500 pupils. There are also five parochial schools with an enrollment of over 800 pupils. Wausau has a modern business college, a training school for teachers, and a county school of agriculture and domestic economy.

The Federal Building in the city contains the Post-Office and the only Government Land Office in Wisconsin.

The assessed valuation of the property in the city is approximately $10,000,000, which corresponds to an actual valuation of some $15,000,000.

INDUSTRIES: With cheap electric and water power and an abundant fuel supply from the sawmills, Wausau is an ideal location for varied manufacturing enterprises. Prominent among the local industries are saw and planing mills, sash and door, furniture, box, veneer, excelsior, and sandpaper factories, flour mills, machine shops, paper mills, breweries, granite works and jobbing houses.

The inbound freight tonnage exceeds 450,000 tons and the outbound 220,000 tons per year.

The United States Forest Service maintains in Wausau a large laboratory to test the suitability of different woods for the manufacture of paper pulp.

BANKS: Wausau ranks fifth in banking power among all the cities of Wisconsin. The four banks and one trust company have a combined capital and surplus of $1,200,000, deposits of $4,350,000, and loans and discounts to the amount of $4,300,000.

NEWSPAPERS: One daily, with full Associated Press reports, and four weeklies give Wausau an excellent news service. These printing offices also do a large amount of high-grade job work for the business firms of the city and county.

LODGES: Wausau has 26 lodges and fraternal organizations, with an aggregate membership exceeding 4,500. Among the orders most strongly represented are the Masons, Woodmen, Elks, Foresters, Eagles, Modern Brotherhood, Maccabees, etc.

CHURCHES: There are thirty congregations and twenty-eight church buildings in Wausau, German, Norwegian, Swedish and Polish sects being represented in addition to the usual English denominations.

A well-equipped $90,000 Y. M. C. A. building is the center of much healthful activity for the young men and boys of the city.

HOMES: Wausau is above all else a city of comfortable homes. Those of the residents who are more than usually endowed with worldly goods have invested heavily in local enterprises, and have done much to make the town attractive instead of going elsewhere to live and spend their incomes. Even many of the day laborers have modest residences with well-kept lawns and gardens, which greatly help the appearance of the city. Four-fifths of the families in Wausau own their homes, and this especially is what makes it "A good place to live in."

RECREATION: The Marathon County Fair, an institution of over forty years standing, is held at Wausau every September in a beautiful natural park of 80 acres, on the west side of the city.

A new baseball park in the northern part of the city is the scene of the regular games of the Wisconsin-Illinois League.

Rothschild Park, four miles south, on the shore of Lake Wausau, with a unique and beautiful pavilion, is constantly utilized for dances, receptions, entertainments, and amusements on the largest scale.

Lake Wausau, formed by the dam across the Wisconsin River, of the Marathon Paper Mills Company, has a surface area of eight

square miles and affords many pleasant excursions in launches, motor boats, row boats and canoes.

The Country Club, with ample grounds adjacent to Rothschild Park, has an attractive club house, with first-class golf links and tennis courts.

The Wausau Club is a popular center for the social, literary, and musical activities of the city.

CONVENTIONS: With the many halls, churches, lodgerooms, clubs and other gathering places, Wausau offers excellent facilities for meetings and conventions of every character, and the increasing number of organizations with a State-wide membership which come to Wausau for their annual meetings proves that the attractions of the city are appreciated. A minimum amount of railroad fare will bring the visitor to Wausau from any part of the State.

---

## NEWS ITEMS AND PERSONALS.

**Dr. N. L. Howison** was elected city physician of Menomonie on May 2nd, for the ensuing year.

**Marriages.** Dr. A. H. Voigt and Miss Bessie Dougherty, both of Sheboygan, were married on April 15th, at Milwaukee.

Ground was broken on April 20th for the new $50,000 hospital building at the **State Home for Feeble Minded** at Chippewa Falls.

**Dr. Otto H. Foerster,** of Milwaukee, was elected president of the Chicago Dermatological Society for the present year at a recent meeting.

**Dr. G. L. Bellis,** Antigo, has successfully passed the state civil service examination for medical assistant at the State Tuberculosis Sanatorium, and has been tendered the position by the superintendent, Dr. J. W. Coon.

**Dr. Victor F. Marshall,** Appleton, left on May 17th for the east, where he will visit various hospitals. He will also attend the annual session of the American Medical Association at Atlantic City.

**Dr. F. X. Schaeffer,** Milwaukee, had his license to practice medicine in the State of Wisconsin revoked in Judge Halsey's Court on April 26th, on the complaint made in last December by Dr. J. M. Beffel, Secretary State Board of Medical Examiners.

The Committee of five which will attend the **Congress of Hygiene and Demography** at Washington, in September, met on April 16th, and elected as chairman, Dr. C. A. Harper, Madison; secretary, Dr. T. L. Harrington;

treasurer, Mrs. Julia Kurtz. It is estimated that at least $1,000 will be required to make a creditable exhibit at the congress and as the state has no money available for such purpose, subscriptions will be asked for.

**Removals.** Dr. P. B. Wallace, Omro to Cannon City, Colorado.

Dr. E. G. Festerling, Sheboygan, has purchased the practice of Dr. Henry Ott at Reedsville.

Drs. J. J. Behorst and A. C. Dana, who are at present serving as house physicians in St. Joseph's Hospital, St. Paul, Minn., will in the near future open joint offices at Fond du Lac and North Fond du Lac.

Dr. A. F. Burdick, Beloit, has disposed of his practice to Dr. M. P. Andrews of Chicago, and will remove to Lansing, Mich.

**Deaths.** Dr. D. McL. Miller, Oconomowoc, died on April 25th.

Daniel McLaren Miller was born May 19, 1836, in New York City, where he spent the early years of his life. There he attended the public schools until entering Columbia College of which he was a graduate.

In 1859 Dr. Miller came west locating at Hartland, where he remained until the outbreak of the Civil War in 1861. He served as surgeon of the 28th Wisconsin regiment and was general surgeon in the hospital at Little Rock, Ark., during the war and at its close he returned to Wisconsin and settled in Oconomowoc, where he had since made his home.

He was a member of the Waukesha County and State Medical Societies.

Dr. W. E. Minahan, who lost his life when the Titanic sank, was born at Chilton, Calumet County, in 1866. His parents came from New York and were among the pioneers of that section of the state. He was graduated from the Chilton High School at the age of 17, and after several years as a public school teacher, entered Rush Medical College at Chicago and graduated in 1891. He first practiced at Calumetville and in 1899 came to Fond du Lac.

He was a member of the Fond du Lac County and State Medical Societies.

Dr. Oliver Hebert, for many years a practicing physician of Milwaukee was found murdered on April 22 on his ranch, near Grand Junction, Colorado, where he had gone in search of health. Dr. Hebert left Milwaukee in 1904.

Dr. Martin J. Lunn, Chicago, formerly of Beloit, died on April 19th, aged 42 years. He was born at Beloit. He was a graduate of the Beloit Academy and of the Chicago College of Physicians and Surgeons.

Dr. Darius Mason, a practicing physician at Prairie du Chien thirty-five or forty years ago is dead at Spokane, Wash., aged 82 years.

# THE STATE MEDICAL SOCIETY OF WISCONSIN

ORGANIZED 1841

## Officers 1911-1912.

J. M. DODD, Ashland, President.

T. J. Redelings, Marinette — 1st Vice President.

C. A. Armstrong, Boscobe — 2d Vice-President.

H. E. Dearholt, Milwaukee, 3rd Vice-President.

CHAS. S. SHELDON, Madison, Secretary. S. S. HALL, Ripon, Treasurer.

ROCK SLEYSTER, Waupun, Assistant Secretary.

## Councilors.

TERM EXPIRES 1917.

1st Dist., M. R. Wilkinson, - Oconomowoc
2nd Dist., G. Windesheim, - - Kenosha

TERM EXPIRES 1912.

3rd Dist., F. T. Nye, - - Beloit
4th Dist., W. Cunningham, - - Platteville

TERM EXPIRES 1913.

5th Dist., J. V. Mears, - Fond du Lac
6th Dist., H. W. Abraham Appleton

TERM EXPIRES 1914.

7th Dist., Edward Evans, - - La Crosse
8th Dist., T. J. Redelings, - Marinette

TERM EXPIRES 1915.

9th Dist., O. T. Hougen, - - Grand Rapids
10th Dist., R. U. Cairns, - - River Falls

TERM EXPIRES 1916.

11th Dist., J. M. Dodd, - Ashland
12th Dist., H. E. Dearholt, Milwaukee

## Delegates to American Medical Association.

L. F. Bennett, Beloit. C. S. Sheldon, Madison. A. H. Levings, Milwaukee

## Alternates.

F. S. Wiley, Fond du Lac. Wilson Cunningham, Platteville. R. G. Savle, Milwaukee

## Committee on Public Policy and Legislation.

A. W. Gray, Milwaukee, Chairman. J. P. McMahon, Milwaukee. F. F. Bowman, Madison.

## Committee on Medical Defense.

G. E. Seaman, Milwaukee, Chairman. S. S. Hall, Ripon. A. J. Patek, Milwaukee.

## Committee on Prevention of Tuberculosis.

C. A. Harper, Madison. G. E. Seaman, Milwaukee. M. P. Ravenel, Madison
J. M. Beffel, Milwaukee. C. H. Stoddard, Milwaukee.

## Program Committee.

A. W. Gray, Milwaukee, Chairman.

## NEXT ANNUAL SESSION, WAUSAU, MAY 22, 23 AND 24, 1912.

The Wisconsin Medical Journal, Official Publication.

## LIST OF EXECUTIVE OFFICERS OF COUNTY MEDICAL SOCIETIES.

| County. | President. | Secretary. |
|---|---|---|
| Ashland-Bayfield-Iron | J. M. Meyers, Odanah | J. M. Dodd, Ashland. |
| Barron-Polk-Washburn-Sawyer-Burnett | H. B. Crommett, Amery | I. G. Babcock, Cumberland. |
| Brown-Kewaunee | T. J. Oliver, Green Bay | I. E. Levitas, Green Bay. |
| Calumet | W. Martens, New Holstein | J. A. Schmidt, Brillion. |
| Chippewa | C. A. Hayes, Chippewa Falls | A. L. Beier, Chippewa Falls. |
| Clark | H. H. Christofferson, Colby | E. L. Bradbury, Neillsville. |
| Columbia | B. C. Meacher, Portage | A. J. Batty, Portage. |
| Crawford | A. E. Dillman, Steuben | A. J. McDowell, Soldiers Grove. |
| Dane | Joseph Dean, Madison | C. S. Sheldon, Madison. |
| Dodge | J. A. Clason, Neosho | G. W. Henika, Beaver Dam. |
| Door | | |
| Douglas | T. J. O'Leary, Superior | W. E. Hatch, Superior. |
| Dunn-Pepin | E. H. Grannis, Menomonie | L. A. Dahl, Menomonie. |
| Eau Claire | H. A. Fulton, Eau Claire | E. L. Mason, Eau Claire. |

| County. | President. | Secretary |
|---|---|---|
| Fond du Lac | G. F. Scheib, Fond du Lac | F. A. Read, Fond du Lac. |
| Grant | C. R. Pickering, Muscoda | M. B. Glasier, Bloomington. |
| Green | L. A. Moore, Monroe | G. S. Darby, Brodhead. |
| Green Lake-Waushara-Adams | G. E. Baldwin, Green Lake | R. H. Buckland, Green Lake. |
| Iowa | W. S. Lincoln, Dodgeville | W. M. Gratiot, Mineral Point. |
| Jefferson | L. J. Bennett, Ft. Atkinson | C. R. Feld, Watertown. |
| Juneau | C. O. Cron, Camp Douglas | A. T. Gregory, Elroy. |
| Kenosha | H. A. Robinson, Kenosha | C. H. Gephart, Kenosha. |
| La Crosse | C. H. Marquardt, La Crosse | G. W. Lueck, La Crosse. |
| Lafayette | J. C. Hubenthal, Belmont | Susanne Orton, Darlington. |
| Langlade | M. J. Donohue, Antigo | J. C. Wright, Antigo. |
| Lincoln | C. C. Walsh, Merrill | Herbert Saylor, Merrill. |
| Manitowoc | J. R. Currens, Two Rivers | A. J. Shimek, Manitowoc. |
| Marathon | L. E. Spencer, Wausau | S. M. B. Smith, Wausau. |
| Marinette-Florence | H. F. Schroeder, Marinette | M. D. Bird, Marinette. |
| Milwaukee-Ozaukee | J. J. McGovern, Milwaukee | Daniel Hopkinson, Milwaukee. |
| Monroe | A. E. Winters, Tomah | A. R. Bell, Tomah. |
| Oconto | J. B. Atwood, Oconto | R. C. Fauids, Abrams. |
| Oneida-Forest-Vilas | J. M. Hogan, Oshkosh | C. A. Richards, Rhinelander. |
| Outagamie | J. S. Reeve, Appleton | F. P. Dohearty, Appleton. |
| Pierce | E. R. Holliday, Ellsworth | S. F. Rudolf, Ellsworth. |
| Portage | J. D. Lindores, Stevens Point | W. F. Cowan, Stevens Point. |
| Price-Taylor | C. E. Nystrum, Medford | G. H. McClure, Westboro. |
| Racine | E. A. Taylor, Racine | Susan Jones, Racine. |
| Richland | P. G. Lasche, Ithaca | A. D. Campbell, Richland Center. |
| Rock | W. J. Allen, Beloit | E. B. Brown, Beloit. |
| Rusk | G. M. Carnahan, Bruce | W. F. O'Connor, Ladysmith. |
| Sank | | Roger Cahoon, Baraboo. |
| Shawano | E. Puckner, Wittenberg | Dr. Steubenvoll, Shawano. |
| Sheboygan | G. H. Stannard, Sheboygan | W. F. Zierath, Sheboygan. |
| St. Croix | Lorne Campbell, Clear Lake | W. H. Banks, Hudson. |
| Trempealeau-Jackson-Buffalo | C. F. Peterson, Independence | H. A. Jegi, Galesville. |
| Vernon | John Schee, Westby | F. E. Morley, Viroqua. |
| Waiworth | H. C. Miller, Whitewater | M. V. Dewire, Sharon. |
| Washington | F. P. Leich, Jackson | S. J. Driessel, Barton. |
| Waukesha | R. E. Davies, Waukesha | Sara T. Elliott, Waukesha. |
| Waupaca | T. E. Loope, Iola | G. T. Dawley, New London. |
| Winnebago | B. C. Gudden, Oshkosh | W. L. Herner, Winnebago. |
| Wood | J. A. Jackson, Rudolph | J. B. Vedder, Marshfield. |

## SOCIETY PROCEEDINGS.

### SECRETARY'S NOTES.

A flag of distress again about the Annual Reports and renewals for 1912. Only a fortnight before the meeting, and 14 reports of the 53 are still missing.

Of the 39 Societies reported to date, 25 show a loss, 6 a gain and 8 are the same as last year. I know the County Secretaries are hard at work, but the meeting is so early this year that more than ordinary effort is required if we are to make a respectable showing by the 21st. It is expected, of course, that the reports will be full and complete, but if you have not yet reported when the May Journal reaches you, do so at once, no matter how many members you have. We must have a report from every County Society before the State Meeting.

*The Wausau Meeting*

looms up bigger and bigger as time goes on. There is a genuine enthusiasm in regard to it, especially in the central part of the

State. The Councilor of the 9th District is writing a personal letter to every member of the nine Societies in his district, urging their attendance at the meeting, and I expect all who can walk, or can raise the necessary car-fare, will be there.

Our Annual Banquet gets better each year, and this year will be no exception. It cannot help being a howling success, for Tom Hay is to be the Master of Ceremonies, and he is getting up some toasts which will make your hair fairly stand on end. The Sawbones Choir will sweetly discourse at intervals.

I know you will be at the Banquet, but don't forget the "Smoker." Lawyer Rosenberry is going to tell us all he knows about "Medical Experts," but we shall have a fine jolly time, in spite of it.

*So come up to Wausau.* You know you need the rest badly, and your patients, too, for that matter. The weather is going to be fine, just cool enough, and everything is gloriously auspicious. So come!

Don't forget the Meeting of the County Secretaries on the afternoon of the 21st. It is the only time in the whole year when the real managers of the institution can come together and talk business, and Assistant Secretary Sleyster has prepared a program of unusual excellence.

Also, it is of the utmost importance that every delegate be at the first meeting of the House of Delegates at 8 o'clock on Tuesday evening. The greater part of the business of the Society for the whole year is transacted at this meeting.

Lastly, remember that it is *your* meeting. Come prepared to enter heartily into the discussion of the scientific program, to do your part to make the social features promote a true fraternal spirit, and to feel a personal responsibility for the highest and best success of the whole meeting.

C. S. S.

## DANE COUNTY MEDICAL SOCIETY.

The monthly meeting of the Dane County Medical Society was held on April 17th in the Chemical Engineering Building, Madison. Dr. C. H. Bunting of the University discussed "The Blood Picture in Certain Glandular Enlargements." The other speakers and their subjects were: Dr. J. A. Eyster, "The Value of Electrocardiagrams in the Diagnosis of Heart Lesions with Demonstrations;" A. L. Tatum, "Some Studies in the Physiology of the Thyroid Gland with Demonstrations;" Dr. A. S. Lovenhart, "The Pharmacological Action of Certain Oxidizing Substances."

The meeting was followed by a lunch at the University Club.

## EAU CLAIRE COUNTY MEDICAL SOCIETY.

The regular monthly meeting of the Eau Claire County Medical Society was held at the Eau Claire Club on April 29. Dr. C. H. Bunting, Pathologist at the State University lectured on "Diseases of the Ductless Glands".

Following the lecture a banquet was served at the Club.

## GREEN LAKE-WAUSHARA-ADAMS COUNTY MEDICAL SOCIETY.

The regular meeting of the Green Lake—Waushara—Adams County Medical Society was held at Princeton, April 26, at the American House with the following physicians present: Drs. J. P. Connell, A. J. Wiesender, C. M. Griswold, F. W. Siegmund, G. J. Racek, J. A. Freelich, J. F. Riordan, G. E. Baldwin, R. L. Williams, and R. H. Buckland.

The meeting was called to order by Dr. Baldwin. The minutes of the last meeting were read and accepted.

The Secretary announced his retirement from practice and recommended that another be found to take his office. The matter was left with the understanding that the Secretary hold office until the annual meeting in December, any needed assistance being offered by Drs. Baldwin and Williams.

*Program*—Treatment of a Group of Typhoid Cases, Dr. C. M. Griswold; Infection of the Urinary Tract by the Colon Bacillus, Dr. A. J. Wiesender; Acute Perforations of the Stomach and Duodenum, Dr. J. P. Connell; Typhoid Prophylaxis, General Discussion.

Dr. Connell assisted the discussion with many practical points developed from experience. His talk on acute perforations cleared up not a few obscure cases where collapse had been followed shortly after by death with nothing in the symptoms to suggest the diagnosis. Meeting adjourned.

R. H. Buckland, M. D., *Secretary.*

## LA FAYETTE COUNTY MEDICAL SOCIETY.

La Fayette County Medical Society held its regular quarterly meeting at the court house April 16th. Drs. Hubenthal and Alexander of Belmont, Ennis of Schullsburg, Leitzull of Benton, Peck, Lehukering, Cooke and Orton of Darlington were in attendance. The next meeting will be held in July.

## ROCK COUNTY MEDICAL SOCIETY.

A meeting of the Rock County Medical Society was held at Janesville on April 30th. The following program was submitted: "Study of Renal Calculi," Dr. E. F. Woods; "Medical Inspection of Schools," Dr. E. B. Brown; "Preparation and Use of Solidified Carbon-Dioxide," Dr. William R. Keller.

## NINTH COUNCILOR DISTRICT MEDICAL SOCIETY.

The annual meeting of the Ninth Councilor District Medical Society was held on April 30th at Stevens Point. Dinner was served at the Sellers Hotel at 7:30, after which the meeting was called to order at the Library club rooms

by President T. H. Hay. The following program was carried out: "Some of the Therapeutic Uses of the X-ray," Dr. Merle Casey, Almond; "Causes and Treatment of Chronic Deafness," Dr. Henry B. Hitz, Milwaukee. Dr. V. A. Mason of Marshfield also read a paper.

The officers chosen were: President, Dr. L. H. Pelton, Waupaca; secretary-treasurer, Dr. R. P. Potter, Marshfield. The next meeting will be held at Waupaca.

## TWIN CITY MEDICAL CLUB.

The members of the Twin City Medical Club entertained the members of the Oshkosh Medical Club at a dinner on April 24th at Neenah. After the dinner a program was presented.

---

**Home Hygiene and Prevention of Disease.** By NORMAN E. DITMAN, M. D.; cloth, price $1.50, net; pp. 333; New York, Duffield & Co., 1912.

The purpose of the book, as the author states in the preface to it, is to supply the public with practical information not only with regard to principles of hygiene and sanitation, but especially as regards the recognition and first aid treatment in beginning sickness and minor ailments. The book is by no means intended to supplant the family doctor, even though it goes at times, we believe, too far into the details of medication—but is meant to deal particularly with that incipient stage of disease when simple measures, safe in the hands of the laity, still ofttimes may successfully avert more serious consequences. The need for early and particularly skilled medical attendance is, of course, properly emphasized at all times.

The subject matter, which covers a surprisingly wide range of material—including, for example, even a list of American health resorts and a discussion on mental diseases—is presented in a concise, yet quite satisfying manner, and given a very convenient alphabetical arrangement.

The book, which no doubt will prove very interesting and valuable to any layman, will find its greatest usefulness in the hands of those who, removed from the convenient and ready aid of the regular physician, are more or less dependent upon their own resources. For the convenience of the latter, a list of drugs, with their doses and uses, is included.

## THE ASSOCIATION OF COUNTY SECRETARIES AND STATE OFFICERS OF THE STATE MEDICAL SOCIETY OF WISCONSIN.

W. F. ZIERATH, M. D., Sheboygan
President.

M. V. DEWIRE, M. D., Sharon
Vice-President.

ROCK SLEYSTER, M. D. Waupun, Secretary.

NEXT ANNUAL SESSION, WAUSAU, 1912.

**Under this heading will be published each month, papers, editorials, sermons, reports of meetings and all that relates to the County Medical Societies of the state. To it all are invited and asked to contribute, especially the County Secretary. It is yours—make good use of it, and may it be of help to every County Society. It will be edited by Rock Sleyster of Waupun, secretary of the new association, to whom all communications for this department, reports of meetings and news matter should be addressed.**

# THE COUNTY SECRETARY AND THE STATE SOCIETY.*

BY C. S. SHELDON, M. D.,
MADISON.

Mr. President and Gentlemen: I assure you this talk will be very informal, and I will try to make it less than seven hours, if possible. Somebody said to me, I don't know why you want to talk to the County Secretaries, you have been writing to them for twenty years; you have said all you know and a great deal more too; you haven't anything new to say, why do you try? I said, I want a few minutes anyway. I want to meet them face to face, so that I know who Dr. Egdahl is, and who Dr. Buckland is, and who the other doctors are, so that I can place them in my mind as to their personality, so that when I write them these letters I can feel a more personal interest than if they were strangers.

As I said last year, for years I tried to have a secretaries' meeting during the general session, but there were so many things to occupy

*Read at the Second Annual Meeting of the Association of County Secretaries and State Officers, Waukesha, June 6, 1911.

our mind and attention it seemed almost impossible to edge in time when we could get together and have an opportunity as we have today to meet each other face to face, so as to get acquainted with one another and see what sort of fellows we are.

We have here today a good attendance of county secretaries, but I wish they were all here. I wish especially that those who are not here were in attendance, because they are the persons that really ought to be here to gain the inspiration and good such a meeting affords. You fellows that are here are all right; you do not need it as a matter of fact, because most of you are up in your work already. I see here such men as Dr. Zierath and Dr. Brown, and other good secretaries who do not need any prodding, you know, who come right up to the scratch, and who have the work on their minds and in their hearts. As to the letters I sent you, I think the best thing about them is that they cannot be read. I haven't known, you know, whether they were read or not, except as I judged from results. Sometimes I praised you; sometimes I scolded you; sometimes I was *very* severe on you. I think my severe letters are often the most effective. Take those written up to the Secretary of Sauk County. He was for years my despair. I got him fighting mad; I did abuse him like a horse thief; he wrote back and threatened all sorts of things, but he straightened up, and stands third on the list of honor for the largest gain this year of all the counties in the state.

I hardly think that some of my letters are read. Usually this matter of legibility is kindly passed over by you, but I am sorry to say that that man over there (Dr. Hall) comes down on me with both feet. Here is a letter he sent me the other day. It says:

"*My dear Sheldon:*

It was very pleasing to get your recent letter. Perhaps I should have been more pleased had I been able to decipher the same. I have not been able to master any of it beyond the date, which I knew, and the signature which I guessed at. There is a significant and particular charm in a letter of yours; it never grows old; it never loses its novelty. One can say to oneself every morning, now here is that letter of Sheldon's, I haven't read it yet, I think I will take another shy at it to-day, and maybe I shall in the course of a few months be able to make out what he means by those T's that look like W's and those I's that have no eyebrows. Other letters are read and thrown away, but yours are kept forever unread. One of them will last a reasonable man a lifetime.

Admiringly yours,

SIDNEY S. HALL.

Now you can see what I have to stand from that man over there, and when I say that for twenty-one years we have occupied respectively

the position of secretary and treasurer of the State Medical Society of Wisconsin, the fact that I am alive is a miracle of mercy.

So much for my writing. I am going to reform; I am going to do less writing hereafter.

With regard to this whole matter that we are engaged in, I have it on my heart and you have it on yours. I believe that this matter of organization which we began seven or eight years ago is really the greatest movement and will be productive of the greatest results of anything which has taken place in the medical profession for a long time. We needed something to bring us together; we needed the spirit and the ideals which this movement has promoted in the medical profession, to do away with sectarianism, to broaden the outlook of the individual physician, to make us work together, not only in the city but in the country, to help ourselves and to help one another, and to fight the enemy and not to fight one another. Now that is the spirit of this movement, and that is one of the objects of our County Medical Society, to meet together often enough so that we shall co-operate not only for our own benefit, but for the benefit of the medical profession, as well as the communities in which we live; and I feel that as a matter of standing by these ideals, it is our duty to be members of our county medical societies, even though no other benefit came to us whatever. But, as you know, the Medical Society, as an organization, if we properly utilize it, if we properly use the power which organization gives us, is the most powerful agency in the promotion of higher standards of medical education—in the securing of better laws so far as the admission to practice in our states is concerned, and in a great many other ways where organization only can be effective. But in relation to this organization idea, we all know what a beneficent use, what inestimable value we can secure from our county medical societies, if we only make use of them as we should. We are in our various counties often widely separated, perhaps where we need one another's help; where our standing in the community depends very largely upon the estimate which we make of each other; where our self-interest, as well as every professional consideration, would lead us to work together, to be of assistance to one another in a thousand ways, and it seems to me that this medical society spirit will further every opportunity and every movement of that sort, and we cannot overestimate the importance to us personally of cultivating such a spirit.

So far as your work this past year is concerned, I wish to thank you here personally for the magnificent work which most of you

present have done for your county societies, and I can only say to you here what I have said probably a hundred times in my letters, to stand by the faith, not to weary of well-doing. We all know what our duty is; if we only do it, that is the main thing. Of course we must preserve our organization. That is the foundation of all of our work. To maintain our organization, of course we must secure our members. According to our plan our membership is renewed every year. A man is delinquent, and delinquent finally, unless he pays his dues every year, and if we are to prosecute this work most successfully, we must have this on our minds; we cannot dismiss it from our minds until pretty nearly the time when our constitution and by-laws say that we are discredited if we have not made out a report by the 15th of April, but we should begin promptly the 1st of January, and keep on working from the 1st of January, and not let up until every delinquent has been secured that it is possible to secure, and this principle cannot be enforced too strongly. Of course, this whole matter depends entirely upon the spirit of the county secretary. If he is interested in his work, if he believes in his work, if he has it on his heart and in his mind, if he thinks of it as he goes from place to place, and from man to man, instinctively that is the first thing to bring up. He says, "Smith, you have not paid your dues, fork over $4;" or, "Brown, what are you doing, I have been sending you letters by the cart-load, now why don't you pay your dues?" And he gets them, as he ought to, and largely this work has to be accomplished through just such personal effort. Use your telephone as well as your letters. It does not cost as much as your postage stamps, and as I say, if this matter is on the secretary's mind, there is no reason why you should not have all of your delinquents in during the first of the year, and be ready to look out for the new men. We often find in the new counties a number of newcomers who are entirely overlooked; those are the men you want to get into your societies before they have gone into forbidden fields, in the way of advertising and unhealthy practices, and one thing and another. As Dr. DeWire says, we need the men who are disposed to be crooked in our medical societies in order to straighten them up and make them as they should be in regard to their procedures medical.

So far as the scientific program is concerned, of course that must be largely a matter of individual experience of the different societies. My own opinion has always been that the best plan is to have either the secretary, who is personally responsible usually for the program, or a committee appointed by the Society, early in the year make out

a program for the full year, whether you have twelve meetings or four or nine, or whatever number you have, and have that printed in durable and permanent form, so that it can be posted up; if necessary, go around and post it up in the office yourself so that no member can be able to say that he does not know the time and subjects of the meeting, and then give notice each time of the meetings as they occur. Follow the plan Dr. Jegi spoke of as having been adopted in the Trempealeau County Society, if that works better, of making your program to consist of reports of cases; that is a matter which you must work out for yourselves. I know it is very difficult, in the country particularly, to secure papers from doctors. It is pretty hard in cities even of moderate size, to get physicians to stop to write papers. I do not wonder at it; we are not accustomed to writing; it is difficult for many of us to prepare anything especially original and it seems really not worth while to write a paper which is nothing more than a compilation from some medical book. If you can make your meetings more successful by having something live and practical in the way of reporting of cases, it is entirely proper to do so, but so far as practicable, I think it is well to look ahead and have your program made out for the whole year in permanent and positive form, so that all may know what the work of the year before them is.

I thank you, Gentlemen, and I hope you will go on during the next year even more successfully than you did the last.

---

## BOOK REVIEWS.

**Fourth Report of the Wellcome Tropical Research Laboratories, Gordon Memorial College,** Khartoum, Andrew Balfour, M. D., B. Sc., F. R. C. P. (Edin.), D. P. H. (Camb.), Director. Fourth Report (1911): Volume A, Medical, $5.00, net; 404 pages with 174 illustrations. Volume B, General Science, $4.50, net; 334 pages with 189 illustrations. Second Review of Recent Advances in Tropical Medicine, etc., $3.75, net; 448 pages, including 32 pages of index; large quarto size, cloth binding.; published for Department of Education, Sudan Government, Khartoum, by Bailliére, Tindall & Cox, 8 Henrietta Street, Covent Garden, London. Depots for North America: Toga Publishing Co., New York City, 35 West Thirty-third Street; Montreal, 101 Coristine Building, St. Nicholas Street.

The mere sound of such names as Khartoum, Sudan, Bahr-El-Gazal touches chords of romance and unconsciously brings to mind the whole entrancing history of the conquest of that great section of Africa. That military subjuga-

tion of hostile tribes was only the preliminary skirmish in the actual conquest of the Sudan, which is now being triumphantly carried forward by science in its struggle against disease and death-producing bacterial and protzoan agencies.

As pioneers, and in the very forefront of the fight, stand the Gordon Memorial College, with its allied department of Tropical Research, founded by one of the Wellcomes.

The story of the Mahdi and of the final triumph of the English forces at Khartoum is fascinating. So also is the story now being written of the fight against tropical diseases carried on over that same ground where Gordon led his troops. One approaches the perusal of a volume dealing with that rather fabulous country with a mind already prepared to enjoy any sort of story emanating from it, so that one, in reviewing even a Laboratory Report from there, is already prejudiced in its favor. Especially is this the case if one has had the opportunity of seeing former reports from the same laboratory at Khartoum.

It is not easy for a reviewer to give adequate expression to criticism of such a volume as lies before him. In the first place he finds himself, for the most part, in a sea of new terms, new diseases, and new nomenclature, at least unfamiliar nomenclature. In the second place he feels a desire to let his enthusiasm have full rein and to lavish encomiums on the work done by the men who have contributed to the report.

Frankly, the reviewer knows very little about diseases caused by the various species of trypanosomes and filariae, but he feels, when reading the articles of this report, that he is in the presence of authority.

This volume, the Medical Section, opens with an Introduction by the Director, Dr. Andrew Balfour, in which he summarizes the work done by the Laboratory Staff and touches upon some of his own researches. There are several articles on Trypanosomiasis in man and animals, Spirochaetes of man and fowls, Kala-Azar, Oriental Sore, Veldt Sore, Fevers in the Sudan, Diphtheria in the Tropics, Human Botryomycosis, Coccidiosis in the Goat, etc. There are several most interesting and beautifully illustrated articles on Sanitation and Water Supply to Small Towns in the Tropics. It is impossible to give the titles of the papers without making this review unduly long. Suffice it to say that there are thirty-four separate articles and a group of six brief notes under the heading of "Miscellaneous."

The various articles in the report are superbly illustrated. Nowhere can be found more beautiful plates of the trypanosomes. The reproductions of the many photographs leave nothing to be desired. One feels that the text is well worthy of the illustrations and the illustrations of the text.

The reviewer has found the reading fascinating, almost, one might say, "novelesque." To all interested in the subject of Preventive Medicine, this book is recommended with the conviction that no novel could be more entertaining than many of the articles of the report.

The publishers deserve unstinted praise for the manner in which they have done their part of the work.

---

## ABSTRACTS.

**On a Case of Chinin Amaurosis.** MANOLESCU, D. N. (From the eye clinic of Prof. G. Stanculeanu in the University of Bukarest. Klin. Mon. für Aug. 49, II, September, 1911, p. 369). A woman, aged 30, took about 13 grams of sulfate of chinin, most likely in order to produce a miscarriage. After 15 minutes she had violent headache, vertigo, tinnitus, vomited and lost consciousness. A hurriedly called physician made injections of caffein. After two hours she regained consciousness, but her sight and hearing were entirely lost. On the second day hearing was partially restored. At the examination on the third day V was O, perception of light very much diminished, both pupils maximally dilated and immovable, the fundus anemic, yellowish red, retina slightly opaque, discs paler, yellowish red, borders hazy, especially at the temporal region, veins enlarged, arteries, as thin as threads, could be traced as far as two disc diameters. The treatment consisted in milk diet, physics and injections of strychnin into the temple. Central vision returned in eight days, V=1 in left eye in two weeks. This was in conformity with the majority of cases, although it took longer in some cases. The visual field for white gradually expanded within a year from the considerable concentric contraction to its normal dimensions, but remained narrower for colors; and the peculiar fact was that its border for blue remained narrower than for red. In most other observations the restoration of the visual field occurred in a year, sometimes later. In almost all cases total achromatopsia existed for a few days. In M.'s case the color perception was restored after twelve days.

The objective symptoms may be divided in constant and inconstant. The constant symptoms in almost all cases are: Maximal mydriasis in the first days of the intoxication, immobility of the pupils to light, anemia of the retina which assumes an opaque yellowish color, decoloration of the discs, which appear atrophic, and the enormous narrowing of the vessels, especially the arteries.

The pupils commenced to react to light on the ninth day and were normal after a year. The fundus gradually became yellowish, but had normal color after a year. The veins at first dilated, soon regained their normal width.

The prognosis of acute chinin intoxication is relatively good, as all disturbances disappear, excepting the contraction of the visual field for colors, the attenuation of arteries and the relative discoloration of the discs. M. for curiosity sake enumerates the different kinds of treatment and believes that none is of any avail. As a prophylactic measure, however, chinin and other poisons with specific action on the optic nerve, as alcohol, nicotin, etc., must be guarded in such patients, as experience showed that their eyes are very sensitive to smaller doses than formerly.—C. Zimmermann.

**On the Pathogenesis of Eczematous (Scrofulous) Kerato-Conjunctivitis.** Colombo, G. L. (From the eye clinic of Prof. C. Guellenga in the University of Parma. Klin. Mon. für Aug. 49, II, August, 1911, p. 164). The pathogenesis of eczematous kerato-conjunctivitis is still obscure. Although it is most frequent in children affected with tuberculosis or scrofulosis, which, according to most authors, is either a latent tuberculosis or predisposes to tuberculosis, convincing proofs are still lacking for an exclusive tuberculous origin. Therefore another hypothesis was advanced, that eczematous kerato-conjunctivitis was caused by the exudative diathesis, a syndrome of symptoms characterized by intestinal troubles, affections of the skin, catarrh of the nose, and air passages, and produced by an auto-intoxication from the intestines. Recent chemical investigations have shown that the presence of indican in the urine is a certain and constant symptom of intestinal intoxication, due to abnormal fermentation and putrefaction in the intestines. Indican is not the etiological factor, as its toxicity is slight, but only the exponent of other absorbed toxic substances which are the chief and direct causes of the clinical picture of auto-infection.

At the instance of Gallenga, C., made systematic researches in that direction and found in 43 cases of eczematous kerato-conjunctivitis indican in the urine, which does not occur in it physiologically. He also calls attention to the frequent concurrence of the acne rosacea and eczematous kerato-conjunctivitis and to the investigations of Polano, who found 55 per cent of cases of acne with indican in the urine. If the observations of C. should be confirmed by more extensive experiences and also his findings of urorosein, whose presence in the urine is also considered as a symptom of auto-intoxication, in the urine of 11 cases of kerato-conjunctivitis, the assertion may be justified that eczematous kerato-conjunctivitis is an expression of auto-intoxication.

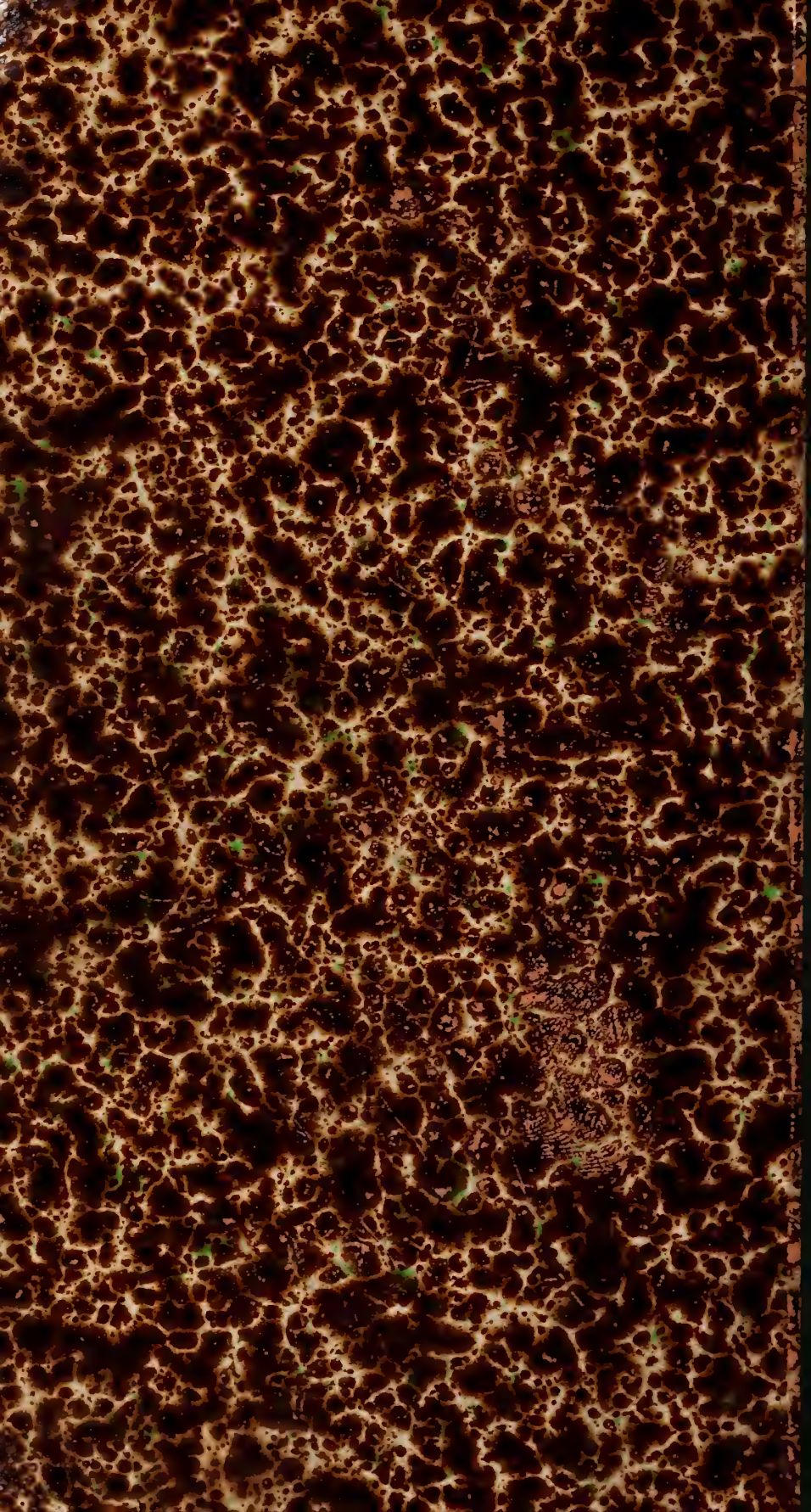
Considering the facts with regard to both hypotheses, C. reached the following conclusions: In predisposed individuals the conjunctival and corneal tissues are changed by toxic substances in the circulation produced by intestinal auto-intoxication. Their abundance may occasionally be the only cause of the disease, whereas, if not present in sufficient quantity for creating the disease, they may elicit a disease in the tissues previously endangered in their resistance by existing tuberculous infection or by scrofulosis.—C. Zimmermann.

---

**On Ocular Affections in plague.** Mizuo, G., Ozaka, Japan. (From the eye clinic of Prof. R. Greeff in the University of Berlin. Archiv für Augenheilkunde LXV, p. 1.) As so far no anatomo-pathlogical examinations of eye affections in plague have been made, M. reports his observations of 7 cases, which he saw in 1907 at Ozaka and in three of which he examined the eyes anatomically. The so-called facies pestica has nothing typical of plague but consists in an expression of the face peculiar to patients suffering from coma in different diseases. Hyperemia of the conjunctiva is one of the most important symptoms of the plague. It is hardly ever missing and occurs in almost 98 per cent of the cases. According to Yamagiva, the sudden rise of

temperature, and painful swelling of the peripheral lymphatic glands, and the hyperemia of the conjunctiva are the three characteristic signs of plague. As experimentally ascertained in 1897 by the German plague commission in India, the plague bacilli may infect the organism from the intact conjunctiva, most likely by passing through the lacrimal canal into the nose and mouth. M. confirms this by a few cases.

Conjunctivitis as primary affection of plague is rare. In two cases observed and reported by M. it presented the aspect of blennorrhoea. The secretion is scanty, thin purulent and sometimes brownish from blood extravasations, and contains colossal quantities of plague bacilli. In most cases the preauricular, parotid, and submoillary glands were affected soon after the onset of conjunctivitis. The bacilli chiefly grow in the reticular layer of the conjunctiva and along the lymphatics. The changes of the conjunctiva, lids and the other organs of a cat which apparently had become infected by feeding on rats, diseased with plague, are reported in detail.

M. feels certain that in no other acute disease but plague ocular complications are as frequent. For their accurate study 24 cases of ocular plague as complication of general plague, so far published, and accurately described, are collected from literature in tabular form, followed by the clinical histories and anatomical examinations of the eyes of two cases observed by the author. Ocular complications in 4.3 per cent of all cases of plague, generally on the fourth day. In 34.6 per cent both eyes were affected, which gives a considerably worse prognosis. Panophthalmitis and Keratitis are most frequent, then ring abcess of the cornea, corneal ulcer, iritis, and conjunctivitis. The seat of the primary bubo seems to have no bearing on the occurrence of ocular complications. The bacilli apparently are propagated exclusively through the blood current. They grow rapidly in the eye, especially after invasion of the aqueous. Of the anatomical results M. particularly emphasizes, that the bacilli do not grow well in the uveal tract, at least in the early stage, and that the hyaloid membrane serves as bacterial filtrum.

C. Zimmermann.